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ABSTRACT

The Multilingual Project is a model of bilingual education that uses a student-centered approach specifically designed for the multilingual classrooms of Australia. The aim of this evaluative investigation was to demonstrate gains in learning that take place as a result of the use of multilingual units, and to identify the characteristics of students who profit most in terms of gains in demonstrated learning from multilingual materials. Subjects were students, teachers, and parents drawn from secondary schools in the Melbourne area. Although all students gained on the achievement tests, gains were greater for those students whose native language was not English. Materials and the program as a whole were well received by students, teachers, and parents. Recommendations concerning the future of the Multilingual Project are made. Although the program is deemed to be operating under adverse conditions, the trends documented in this report indicate that the theoretical assumptions of this model of bilingual education have an empirical application. (Author/JB)

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LA TROBE UNIVERSITY

EVALUATION OF FACTORS ASSOCIATED WITH SUCCESS IN BILINGUAL EDUCATION

RESEARCH REPORT

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U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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FOREWORD AND ACKNOWLEDGEMENTS

The relatively recent recognition that Australia is a multicultural/multilingual society has some clear implications. One of the most salient of these concerns is the maintenance of linguistic minority students' ethnic language. Whereas there seems to be a consensus of opinion on the necessity for these students to gain full mastery of English, the same cannot be said about the ethnic language. This is equally true for the children of Australia's indigenous minority, the Aborigines and the children of non-English speaking immigrants.

Although ethnic language maintenance for the oncoming generation continues to be a controversial educational question, there are clear signs that official opinion expressed in government publications (Schools Commission 1975; Department of Education 1976; The Australian Ethnic Affairs Council 1977) and ethnic community demands voiced in the ethnic press (e.g. Greek Orthodox Community of Melbourne and Victoria 1973, 'Horizons' Education Magazine, 1, 1978) favour experimentation with community language teaching and bilingual education.

Recent theories on bilingual language development point to the need for the successful implementation of such programmes. These arguments refer to both the intellectual and social development of the student. The proposed 'developmental interdependence' and 'threshold' hypotheses are particularly pertinent to the intellectual development. In the words of Cummins -

> The 'developmental interdependence' hypothesis proposes that the development of competence in a second language L2 is partially a function of the type of competence already developed at L1 at the time when intensive exposure to L2 begins. The 'threshold' hypothesis proposes that there may be threshold levels of linguistic competence which a bilingual child must attain both in order to avoid cognitive disadvantages and allow the potentially beneficial aspects of bilingualism to invluence his cognitive and academic functioning. (1979: 1)

(See Skutnabb-Kangas and Toukomaa 1976; Toukomaa and Skutnabb-Kangas 1977; Lasonen and Toukomaa 1978; Cummins 1978, 1979)

If Cummins and his Finnish colleagues are right then mother tongue maintenance is vital to the full intellectual growth of the bilingual migrant child.

Concern for the bilingual student's social development is a question that the literature on language maintenance has by no means overlooked (see Edwards, 1977). However, those questioned about the desirability of language maintenance and/or disposition towards the ethnic minority groups are generally, although not exclusively, members of the ingroup, the minority in question (see Gardner and Lambert 1972). This approach reflects an underlying assumption that language maintenance programmes are only for the ethnic population. Some educators in Australia, including the authors, feel that language learning programmes should be extended to the whole school population. (Clyne 1974; Claydon, Knight, Rado 1977). If language maintenance programmes are to support bilingual students' social development they must not be seen as a remedy for the disadvantaged but rather as an enrichment for all. Therefore, the teaching of ethnic languages, and/or bilingual education, concerns schools with a very low population of bilingual students as much as schools with a high proportion.

Previous research has shown that migrant children in Australia typically achieve at lower levels in school than monolingual Australian children. The rationale for the Multilingual Project is that bilingual students are provided with learning materials in both of their languages and, at any time, they may choose the language of instruction. Therefore, students' learning is mediated by their total linguistic knowledge rather than by their skill in one particula language. The use of bilingual materials, then, may enable bilingual students to learn at a rate comparable with their monolingual peers and so help to redress the existing imbalance. The thrust of the Project is to facilitate the learning of subject matter in general, and not particularly language skills.

The Multilingual Project is an innovation in curriculum development based on the theory of language universals as it relates to bilingualism. The Project has been assessed on qualitative data to see if teaching materials are useful, if they are suitable, of the right quality and so on. Phase II of the Project's evaluation was designed to gain a better understanding of the extent of learning fostered and the optimal conditions for learning, and so, to enable the materials to be used more effectively in the schools.

This study was made possible by the assistance of many others. We are indebted to:

(a) Participating schools:
We were gratified by the willingness of school administrators to offer facilities to enable the data to be gathered. Our sincere gratitude is expressed to all the teachers, students and parents who gave time and effort to the completion of our research instruments.

(b) The Dean and other staff of the School of Education at La Trobe University:
We were at all times assured of our colleagues' interest and support.

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BILINGUAL EDUCATION EVALUATION RESEARCH PROJECT

* * * * * * *

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CHAPTER I

INTRODUCTION

BACKGROUND

The Multilingual Project is a form of bilingual education developed in the Centre for the Study of Teaching and Human Interaction at La Trobe University. It is designed for a situation where immigration has created linguistic minorities, as is the case in Australia. It provides learning materials for bilingual students in parallel forms of English and seven ethnic languages. This approach recognises the need to offer students with a non-English speaking background an expanded programme which takes cognizance of their family language. In this way the Project materials are of direct assistance to schools that wish to apply bilingual education.

In Australia immigration has had a considerable impact because of relatively large proportion of non-English speaking immigrants. These migrants and their children form about one fifth to one fourth of the present population (Price 1976). The multicultural/multilingual nature of the Australian society is reflected in its schools. An increasing number of classrooms must accommodate students whose competence in English differs in varying degrees from the English language competence of native speakers. However, students with a non-English-speaking background often command another language in its spoken and perhaps also in its written form sufficiently well to make skill and subject matter learning accessible to them.

Accessibility of information is a key issue in bilingual education. In a bilingual education programme two languages serve as the medium of instruction. The term does not specify how this dual language instruction is to be carried out in practice. This concern for cognitive development is accompanied by other considerations of a psychological and social nature, e.g. self-concept, social identity, biculturalism.

The fact that in many Australian classrooms there is a communication gap between teachers and students, and also between students themselves has focussed attention on language differences. Bilingual education seemed to offer a reasonable solution when examined from the point of view of the individual. In the context of the classrooms, which are multilingual, bilingual education held out less promise. Considering that there are over eighty languages spoken by immigrants in Australia, it is no wonder that a particular school may be attended by native speakers of over twenty different languages. How can any school provide consistent instruction in so many languages? If a compromise is reached and only the larger groups accommodated is this really fair? The larger groups, for example, Greeks and Italians are not only numerically stronger compared to others, but also better organized and established so that they are better able to look after their own interests and that of their children. Indeed, the larger communities are very active in providing ethnic school facilities. The small linguistic groups are clearly much less able to add an ethnic language element to the education of their children.

The dilemma of choosing a language for bilingual education is aggravated by the fact that we have relatively few teachers who have been trained in bilingual teaching methods or who have a sufficient command of a second language to be eligible for bilingual teaching. Evidently a new approach to bilingual education has to be developed where the need to match student language with teacher language is partly eliminated. This can be done b confronting students directly with the learning process by means of specifically designed curriculum materials. Such materials need to incorporate a variety of features. For example,

1. Texts should be bilingual in the English and the ethnic language, thus making bilingual learning optional.

2. Texts should be conceptually and stylistically within the reach of students, so that reliance on teacher mediation is greatly reduced.

3. Activity materials should accompany printed or taped texts to ensure variety and active student involvement.

4. Exercises and feedback should be incorporated in the materials.

5. Texts should be so structured as to maintain the interest of students working independently or in small groups.

6. Texts should stimulate further exploration of the topic in the form of reading, discussion, production of illustrative materials of all kinds, e.g. visuals, acting.

The features listed above highlight the difference between teaching and learning materials. However, learning materials of the kind we have specified do not eliminate the teachers. On the contrary teachers will have to add to their repertoire of skills. For example, they need to be familiar with small group processes, gain the support of bilingual colleagues, teacher aides and members of various ethnic groups. These individuals are the human resources together with the competent bilinguals among the students who will help teachers to bridge the language gap in the classroom when in individual cases texts fail to clarify new concepts. Teachers must also be aware of other resources and activities to ensure continuing interests in the topic and continued personal contact and involvement with students.

The Multilingual Project aims at developing learning materials of the kind we have specified. These materials are unique in various respects.

1. They enable students to study at their own cognitive level in two languages, in their ethnic language, and in English.
2. Students can choose the language of instruction by referring to one of the language texts at a given time, or by cross-referencing at their own volition.
3. Students can study in the language of their first choice and revise in the other.
4. Students can learn independently of the language(s) the teacher can use for purposes of instruction.
5. Activities and illustrations are an organic part of texts.
6. Students can check their own progress.
7. Students can work together in small groups.
8. Monolingual students and bilinguals can learn together.

In sum, the Multilingual Project is designed to meet the immediate needs of multilingual classrooms. Since the non-English language versions closely follow the English texts the range of languages included in the Project can be extended as the need arises, in a very short time, namely the time required for translating.

Since a bilingual's two languages are in a domain specific and dynamic relationship, further since it is difficult to know how strongly students identify with their own ethnic group or with their Anglo-Australian peers, it is important to allow students choice in the language of instruction. The fact that the Multilingual Project makes bilingual education optional is its most significant contribution to educational practice.

The Multilingual Project materials have been developed primarily for the 10 to 14 age group. Although older students and adults have used them and on a few occasions also year 5 students. We have elected to demonstrate the feasibility and research the value of the Multilingual Project materials at the lower secondary level because we work within the framework of a university school of education mainly concerned with the initial training and further education of secondary school teachers. Consequently our professional expertise and links with schools are strongest at the secondary level. The Multilingual Project units are social science oriented. The area plays an important role in the lower secondary school and has a flexible curriculum, leaving teachers reasonably free to design their own courses. The same can be said about E.S.L. teachers. It was, therefore, expected that these teachers will find it relatively easy to adopt our materials. Since at the lower levels there is no examination pressure they would be prepared to experiment with a bilingual approach which was outside their experience. We also thought that at the lower secondary level we could introduce topics of general interest thereby catering for the whole school population.

For more senior students learning materials would have to be much more specific, often presupposing initial study in a particular discipline. This requirement significantly reduces the number of potential students for a given topic. Under these circumstances, coupled with the pressure of examinations, it would have been difficult to find a sufficient number of students and teachers willing to participate in our experiment. Whereas, we are constantly approached by volunteers from the lower secondary sector. This age group has a further advantage. On the whole it can be assumed that they have experienced formal schooling and so have acquired some study skills. The

Project could build on these skills and extend them. (Teachers report that this in fact is the case).

Although some of the unit texts are also available on tape and can be used by illiterates as they provide all the necessary information and feedback for learning, the project is mainly oriented towards students who possess the rudiments of study skills. This allows the Project to focus on its primary purpose, namely that of furthering subject matter or discipline based conceptual development. Underlying this approach is the assumption supported by the language acquisition literature that conceptual development is a prerequisite of language development. If two languages are involved in the learning process, both should be strengthened. There is some evidence that two languages play a similar role in reinforcing learning to study and revision in the one language (Kolers 1968). As will be seen participating teachers and students in their subjective assessment throw some light on this question.

AN HISTORICAL SKETCH

Pilot Phase, 1971-1972

A bilingual education model subsequently developed in detail and embodied in the Multilingual Project was conceived during the winter months of 1971 in response to reading about ethnic minority students' education in Australia and overseas, to accounts given in public lectures and private conversations by persons like Alison Goding of the Psychology and Guidance Branch of the Education Department of Victoria, members of her staff, colleagues, teachers, other interested observers and personal experience in the classroom from 1945 onwards.

The first tentative and approximate description of the model is contained in a paper presented at the Conference on the Educational Problems of Migrant Children, organized by the Centre for the Study of Urban Education, School of Education, La Trobe University in November 1971. In this paper, it was argued that special English language instruction makes a necessary, but insufficient contribution to a migrant child's education, because a child who has limited competence in English when attending normal classes

> cannot fully participate in the ongoing instruction and activities. During the period of transition between the two languages the child can easily find himself in a linguistic no-man's land. This can have disastrous consequences because it is tantamount to an intellectual moratorium at the very time the child needs all the cognitive stimulation he can get. (Rado, 1971:5)

In order to provide the necessary cognitive stimulus it was suggested that bilingual education might offer a viable solution. The model put forward was partly based on the principles underlying the bilingual education programmes stimulated and maintained by the Bilingual Education Act passed by the United States Congress in 1967. (For a brief account of the evolution of United States Federal policy on bilingual education, see Mackey and Beebe, 1977:5-10.) A particular way of implementing bilingual education, namely the method employed by the Coral Way Elementary School (Bell, 1969) provided the most significant guidelines among the American models studied. In this Spanish/English programme children are first introduced to new concepts in their L_1*, then instruction is repeated in the form of revision in L_2. In this manner the same ground is covered twice, reinforcing learning and exemplifying the linguistic expressions of concepts in both L_1 and L_2. With respect to the Australian scene, it was felt that the principles and techniques embodied in the Correspondence School of the Education Department of Victoria could be adapted to cater for the needs of migrant students. This school serves children living in the outback or studying a subject for which their school cannot provide a teacher because the minimum number of students enrolled in the subject has not been reached.

---

* In this report, L_1 stands for ethnic language or migrant language or community language; L_2 stands for English, irrespective of the order of acquisition.

> Our correspondence school for the children of the outback has earned a world wide reputation for pioneering and successfully implementing a schooling system for children beyond the reach of normally provided facilities. Once more we are faced with a communication problem. This time the breakdown is due to a linguistic distance, not to a geographical one. We should take up the challenge and contribute to educational practice in this important way. (Rado, 1971:7)

The 1971 model was an ambitious one, planned on a grand scale as it envisaged a multilingual correspondence and resource centre. The centre was to engage in various activities. For example, it was to develop learning materials in various migrant languages, distribute them, and supervise their use along the lines developed by the Correspondence School. In sum, the centre was to work in close co-operation with schools and be responsible for some of the instruction given to migrant students. This activity of the centre was partially realized by the Multilingual Project. Regrettably, lack of funds has prevented the Project from providing all the supportive services that were originally planned. Nevertheless the Project has established itself and has grown considerably in less than a decade.

In contrast, the resource centre did not progress beyond the planning stage. It was described and costed in a paper with only limited circulation. In a climate hostile to or at least disinterested in L_1 maintenance because Australians were suspicious of multilingualism as a divisive force in the community, the sum of approximately $56,000.00 required to establish such a centre seemed prohibitive. So the idea was abandoned. Subsequently centres servicing teachers and pupils, including migrant students, have become acceptable and have been established throughout Australia. For example, the Richmond Community Education Centre carries out many but not all of the functio envisaged by the Project director in 1971. It was to be an international centre providing comprehensive community/foreign language learning facilities for monolingual English speakers and others with a non-English speaking background, for both children and adults. Centre services were to include the development of subject matter learning materials for all age groups and subjects in a wide range of languages, foreign language library facilities, and a variety of activities (e.g. multilingual art and craft classes, drama workshops) during the week and at weekends.

The failure to establish a Multilingual Resource Centre was compensated for by the immediate progress made in the development of multilingual curriculum materials. The idea to make learning materials student centred, in other words to teach students directly, partially bypassing the teacher through parallel texts in English and in their language, aroused interest. Clearly it had to be shown that it is possible to stimulate learning in the student's L_1 irrespective of the teacher's language skills. It had to be proved that the teacher can foster learning by using his organizational skills with respect to small group work and the utilization of bilingual individuals. To make this realizable learning materials had to incorporate the type of explanations, exercises and illustrative materials usually provided by the teacher.

The opportunity to demonstrate the feasibility of this approach presented itself early in 1972 when Leslie Claydon in the Centre for the Study of Urban Education, School of Education, La Trobe University organized the first Bachelor of Education Task Force attached to Collingwood High School. The aim of these Task Forces is to develop a programme tailored to the needs of the school where they are located. Schools volunteer to host task forces over a period of two years. This is an indication that they welcome innovation. As Collingwood High School is a high migrant density school, the first Task Force partly concerned itself with migrant students. As the Multilingual Project promised to pay attention to migrant students' language needs, it was welcomed by the Task Force organizer, the Task Force team, the school principal, Betty Watts and the vice-principal, Frank Golding. Consequently, the trialling of the Multilingual Project materials was ensured. With respect to the development of the materials, it was originally intended that members of the Task Force would provide the necessary manpower. However, this proved impracticable as it placed an excessive burden on the team who had a heavy workload of teaching, study and research. (For details of the School of Education's involvement with Collingwood High School, see Claydon et al. 1973) At this point Bert Schruhm, then Director of Secondary Education in Victoria, was informed of the Multilingual Project as an impending experiment in migrant education. He approved of the idea and seconded the equivalent of a full-time teacher to the Project.

In 1972, despite an acute teacher shortage, the Project was able to enlist the services of two teachers employed on a half-time basis. These teachers developed a unit on Captain Cook which was to form part of a series on Australian explorers. A parallel Greek language version was also produced. An enthusiastic Migrant English teacher, Patricia Poblete trialled the unit at Collingwood High School. It became immediately apparent that the range of languages had to be extended if the materials were to serve the multilingual classroom. The financial problem posed by the need to translate into several languages was solved when in 1973 the Education Department of Victoria undertook to meet these costs. This enabled the Project to produce six migrant language versions to accompany the original English text. An eighth language, Spanish, was added in 1976 on request by Westall High School, suddenly faced wit a group of over 30 Spanish speakers from South America with a minimal knowledge of English.

The trialling of the unit on Captain Cook in 1972 taught us a great deal about techniques of presentation and topic choice. Initially we had chosen Captain Cook as a topic because we wanted to show that apart from Aborigines, Australia was a country of immigrants. This notion, we felt, would reduce the psychological distance between the migrant child and his monolingual English speaking peers. We were only partially successful in conveying this message and the unit was abandoned. It has served a purpose in that it made more informed planning possible. These plans are described in a paper presented at the National Seminar on Migrants and their Communication Needs, (Rado 1972).

> It has been estimated that nine units would provide sufficient learning materials for a year's work. Pupils would spend a proportion of the school day on these units, preferably at times when their peers are also engaged in individual tasks.
>
> The units will cover a series of topics aimed at introducing students newly arrived in Australia to aspects of this country with special emphasis on information and exercises which may be of assistance in helping students and their families to adjust to the changed environment and culture. Hence the topics will include:
>
> Life styles and sport.
>
> Who can help?
>
> Food.
>
> Clothing.
>
> Homes.
>
> Family.
>
> Festivals and National Days.
>
> Materials will centre around cultural differences and similarities, with provisions for comparison with their previous country or local area. Ideally, some of these exercises will be done by the whole class, not just by children with English language difficulty.
>
> Unit materials will consist of the original contributions of the teachers involved in the development of the units together with adaptations from commercially produced materials, and Units of the Social Sciences Project. To ensure comparable standards, materials will be reviewed by members of the Social Sciences Project team. The philosophy and strategies developed by the Social Sciences Project will be adopted in a modified form. Because of the nature of the exercise most of the factual information must be contained in the materials. It would be difficult to supply exploratory materials in significant quantities to these learners.
>
> Unit sub-topics will be autonomous assignments supplemented by visual and taped materials and will contain a variety of exercises. Some of these will be self-corrective, others will be more open-ended requiring the services of interpreters who need not be trained teachers.

> Translation into different languages will be effected as funds become available. The initial project is designed to suit the educational standard of Forms 1 and 2 and will be employed with Italian and Greek speaking students.
>
> (Rado, 1972: 12-14)

Some of this blueprint was realised in 1973 and a unit Sport was completed. This unit did not provide a sufficient range of activities and so had limited success. It was shelved. Subsequent units proved much more successful and have been maintained in circulation because of continuing demand.

The Project director in her roles of teacher and researcher has continued to co-operate with the B.Ed. Task Forces. Consequently, Brunswick Girls High School (now Brunswick East High School) where the second Task Force was located, also adopted the Project materials.

By the end of 1972 the pilot phase of the Project was completed. From now on its activities gradually expanded. It has maintained a steady rate in the production of curriculum materials and in the increase of the number of schools it serves.

THE MULTILINGUAL PROJECT FROM 1973 ONWARDS

In 1973 the Multilingual Project established itself as a development and research undertaking that has two aspects. It combines theoretical considerations with the practical purpose of giving immediate service to schools.

The Project builds on the sound educational principle of taking the student's existing knowledge as a basis for future learning. In the case of the immigrant child who knows another language, this can assist him in continuing his education at a level commensurate with his intellectual ability, by using his total linguistic knowledge. It can also reduce the adverse effects of the frustrating waiting period when learning is largely limited to the acquisition of English. Clearly, immigrant students need to learn English, but they must also continue their general education.

The Project is designed to serve the following groups of students:

1. Migrant children who have not achieved full competence in English and therefore do not make good progress at school.

   They can be classified into two groups:

   (a) those who are recent arrivals and have experienced part of their schooling abroad; and

   (b) those who have a strong L_1 background in their home and neighbourhood.

2. Migrant children who are competent in English and in their L_1 tongue.

3. English-speaking students to assist them in second language acquisition.

   (a) to foster students' conceptual development;

   (b) to stimulate students' language development in the mother tongue and in English;

   (c) to provide student satisfaction with the learning process;

   (d) to reduce the difficulties created by a multilingual situation;

   (e) to support teachers sympathetic to the students' linguistic and cultural heritage;

   (f) to provide teacher satisfaction with the teaching process.

The materials in question have been specifically developed for the Australian situation. As a result of immigration, students with a non-English speaking background are to be found throughout the school system. This distribution of students and the diversity of languages involved precludes the possibility of providing bilingual teachers for all those who would profit from bilingual education. The Multilingual Project has specialized in developing bilingual learning materials that enable students to learn bilingually with the help of monolingual English speaking and/or bilingual teachers. In this respect the materials are unique and have attracted world-wide attention. They enable migrant students to learn in small groups or individually in a way that fosters their conceptual and language development both in L_1 and L_2, and helps in the acquisition of study skills.

The advantage of the materials is that they give students the opportunity to learn in the language of their preference. This preference may not only be governed by language dominance, but also by the topic and the social situation, and should be left to the student's own judgement. The emphasis on student choice is based on the assumption that to feel at ease with the language of instruction will facilitate learning. Once learning has taken place, the student can be encouraged to compare the bilingual texts. Observing how the same idea is expressed in English and the ethnic language should stimulate language development in both.

The teaching materials produced in booklet form, some also on tape accompanied by a resource kit, consist of a series of topic units. Each unit is produced in eight languages, i.e. English, Arabic, Croatian, Italian, Greek, Serbian, Spanish, Turkish.* The booklets are illustrated and contain all the necessary information and explanation enabling students to study independently or in small groups. A variety of exercises accompanied by correction guides are also incorporated into the text with the purpose of making students responsible for and actively involved in learning. The resource kits contain a variety of audio-visual items to stimulate student activities other than paper and pencil work. Each student is expected to have two booklets, one in English and its parallel version in L_1. The booklets across languages match page by page, thereby facilitating cross reference. This also ensures that monolingual English speaking teachers can follow the progress of their bilingual students. The Project materials make it possible for speakers of different languages, including monolingual English speakers, to study together in the same classroom. The resource kits contain instructions in the eight languages mentioned above and are shared by all students. A school requires only one resource kit per unit.

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* In 1979 a grant from the Victorian Ministry of Immigration and Ethnic Affairs has enabled the project to extend its range of languages to Vietnamese and Chinese (Mandarin/Cantonese).

DESCRIPTION OF UNITS

The Multilingual Project has completed the following units which are in use in schools: Animal Families, Buying, Communications, Computers, Convicts in Australia: a Tapescript, Gold: Life on the Australian Gold Fields, Libraries and You, Melbourne: The First Fifty Years, Myths of the Australian Aborigines and Traffic Accidents.* Writing is in progress on four units: Papua New Guinea: Young People, Wool, Explorers of Australia and The Great Depression in Australia. (*See Appendix 1 for details)

TEACHERS AND SCHOOLS

The schools participating in the Project throughout Australia belong to the state secondary, technical and primary divisions and the independent sector including Catholic schools. Participating teachers include TESL, modern/community language, and other subject matter teachers.

The Project provides junior secondary school students with learning materials for a whole school year, used for about one hour daily. The units can be studied on an individual basis, by ethnic groups, by mixed ethnic groups, and in a normal classroom situation where migrant students and monolingual Australians study the same material in the language or languages of their choice.

Since the materials are student centred to suit the Australian multilingual classroom, the role of the teacher is changed, but by no means diminished.

TABLE 1.1

MULTILINGUAL UNITS 1972-78

Unit	Author(s)	Date
* *Captain Cook*	Margaret Khong & Deidre Clements	1972
* *Sport*	Margaret Khong & Deidre Clements	1973
Communications	Marian Turnbull	1973
Myths of the Australian Aborigines	I. Shayne Boyd	1973
Animal Families	Audrey Dudley & Margaret Khong	1974
Libraries and You	Caroline Erhardt & Marian Turnbull	1974
Traffic Accidents	Roberta Kings	1974
Buying	Roberta Kings	1975
Melbourne: the First Fifty Years	Audrey Dudley & Margaret Khong	1975
Computers	Howard Dossor	1977
Gold: Life on the Australian Gold Fields	Marian Turnbull	1977
Convicts in Australia: a Tapescript	Sue Alexandra	1978

*Those which are discontinued

The success of his lesson will, in part, depend on his skills of organisation within the classroom in managing small group learning. In addition, he needs to recognise the human resources available to him and develop means of eliciting the support of his competent bilingual students, bilingual colleagues, bilingual teacher aides, ethnic parents and volunteer members of ethnic communities. In this way, the difficulties that can arise when teacher and pupil do not share a language are compensated for by greater reliance on, and active encouragement of, home and community involvement in the learning process, which should lead to a genuine sharing of responsibilities. Further, it is our contention that the type of small group work the Multilingual Project materials facilitate could offer valuable learning experiences to monolingual English speaking students wishing to acquire a second language. In fact, it is of utmost importance that all students in an educational system should be given qualitatively similar treatment, therefore extension of the project to monolingual speakers would be desirable. In some schools, this has been done.

PUBLICITY

Information about the Project is being disseminated through publications, conference papers and contributions to a variety of in-service and pre-service teacher training sessions at La Trobe University and other educational institutions throughout Australia. The Project has also attracted the favourable attention of the media, the Department of Foreign Affairs, the information services of the Education Department of Victoria and the Newsletters of some subject associations in Victoria and other states. Internationally, the Project is known through personal consultation and publishing with book companies that have an overseas outlet and with international journals. Further, ERIC Clearinghouse for Languages and Linguistics has selected and reproduced five documents including "Bilingual Education" and "Multicultural Education". These monographs give detailed information on the Project.

Interest in the Project has been steadily growing. Since its inception, approximately 14,000 unit booklets have been distributed across Victoria and all other states. Some sample copies have also been sent on request to the U.K., Germany, Sweden, Canada, United States, Ireland, India, Singapore, New Zealand, South Africa, Fiji and Holland. (The total number of resource kits supplied is 300.)

The Inner London Education Authority, Aberdeen Park, has been successful in its application to develop bilingual learning materials modelled on the Multilingual Project. Development is in progress.

The monographs "Bilingual Education" and "Multilingual Education" have also been widely distributed. Almost all teacher training institutions in Australia have added these publications to their library collections as they are standard reference texts in some of their courses. La Trobe University has had requests for these monographs from various countries, in particular, from the British Library and the Library of Congress. The Library of the University of California at Los Angeles has initiated an exchange system involving these monographs.

Through 1977-78 the Project received three to four inquiries per week. The value of the materials is being recognised by subject associations (e.g. Commercial Teachers, Social Studies Teachers, Home Economics Teachers.)

CO-OPERATION WITH EDUCATIONAL AGENCIES

The Project is maintaining good relationships with the Audio Visual Education Centre. It has had discussions with the staffs of the Social Science Materials Project and the Social Education Materials Project. It has the support of the State Library and the Curriculum Development Centre.

RESOURCES AVAILABLE

La Trobe University

La Trobe University provides accommodation and some staff. Over the period 1973-77 the University has allocated to the Project approximately $1,000.00 and in 1978, $300.00 from its research funds to promote research in bilingual education.

Education Research and Development Committee Grant 1977-78, $8,539.00 to study "Student Characteristics Associated with Success in Bilingual Education."

The sums received from the University and E.R.D.C. are for research and cannot be used to cover production costs. Yet the production phase of the Project cannot maintain itself by selling the materials, as it does so at a loss. If the Sub-Project charged the full production price of the booklets and resource kits it would make them too expensive for most schools, thereby defeating its own ends. An anomalous situation is likely to arise where students in greatest need of the units could not be supplied with them.

Education Department

The Education Department of Victoria has accepted the responsibility of providing the necessary manpower through teacher secondment for the writing and translating of the learning materials.

Education Department expenditure with respect to the production phase includes,

(a) professional salaries of three half-time fully qualified teachers,

(b) salaries of teachers who are engaged in translating these materials and are native speakers of Arabic, Croatian, Greek, Italian, Serbian, Spanish and Turkish.

Charitable Bodies

The Myer Foundation ($2,000.00 in 1973); The Sydney Myer Charity Trust ($11,152.00 in 1975); and the Buckland Foundation ($7,000.00 in 1975) have given grants for the production of units and resource kits. However, the policy of these bodies precludes continued support. Funding from other sources will need to be sought for this aspect of the Project.

COMPONENTS OF THE PROJECT

Sub-Project 1. Development and evaluation.

This had an opening phase which was described in the historical sketch and was completed by 1977. Initial evaluation results were fed back into the Project to modify content and format of materials. However, development and evaluation are continuing key processes in any curriculum project. Chapters II and III of this Report detail subsequent work in these areas for the Multilingual Project.

Sub-Project 2. Production of learning materials.

Sub-Project 2 was initially undertaken to produce materials for Sub-Project 1, that is, for evaluation and bulk classroom testing. Although the two sub-projects interact, Sub-Project 2 is now an independent venture in that its production target is aimed at continuing to meet the demand for bilingual learning materials. This it endeavours to do, irrespective of researc needs. The significance of Sub-Project 2 lies in the growing demand throughout Australia for the Project materials. They have been distributed in all states as well as overseas. Further, there is a constant stream of requests for information. A small production unit carries out the continuing task of dissemination of information and materials.

TABLE 1.2

THE MULTILINGUAL PROJECT STAFF OVER THE PERIOD 1972-79.

Director:

Marta Rado	1972 +

Teachers seconded by the Education Department of Victoria for Curriculum Development

Deidre Clements	1972
Margaret Khong	1972-75
Chris Nolan	1973
Marian Turnbull	1973-74; 1975 +
Audrey Dudley	1973-76
Roberta Kings	1973-77
Caroline Erhardt	1974-75
Howard Dossor	1975 +
Sue Alexandra	1976 +

Research Assistants:

Shirley Mayer	1973 +
Barbara Hutton	1976
Charles Davis	1977-78

Evaluators:

Marta Rado	1976 +
Lois Foster	1977 +
Glenn Rowley	1977-78
Ramon Lewis	1979

TABLE 1.3

INSTITUTIONS HOLDING SAMPLE MATERIAL

Aboriginal Studies	Australian Institute of Aboriginal Studies, P.O. Box 553, Canberra A.C.T. 2601.
Access Skills Project	Gillian Zaks, Access Skills Project Team, Curriculum and Research Branch, 234 Queensbury St., Carlton 3053.
A.C.E.R. Library	Frederick St., Hawthorn. 3132.
A.C.T. School Authority	Mr. D.D. Stewart, P.O. Box 20, Civic Square, Canberra A.C.T. 2608.
A.C.T. Schools Authority Store	Rear, 5 Isa St., Fyshwick, A.C.T. 2609.
Adelaide College of Advanced Education Library	46-68 Kintore Ave., Adelaide, S.A. 5000.
Australian Greek Welfare Society	Mr. Aris Pappas, 168 Lonsdale St., Melbourne.
Australian Information Service	Mr. B.C. King, 99 Queen St., Melbourne.
A.V.E.C. Special Services	Mr. Tom King, Education Department, 234 Queensberry St., Carlton 3053.
Bendigo S.C.V.	State College of Victoria, P.O. Box 199, Bendigo.
Blind Institute	Marge Skinner, Aids Advisory Centre, Association for Teachers of the Blind, 454 Kooyong Road, Kooyong.
Burwood State College	221 Burwood Highway, Burwood.
Catholic Education Office of Western Australia.	Mrs. J. Caproni, Education Officer, Child Migrant Service, 19 Henry St., Shenton Park, W.A. 6008.
Catholic Education Office	1 Abercrombie St., Chippendale, N.S.W. 2007. (P.O. Box 145 Broadway N.S.W. 2007)
Center for Applied Linguistics	Dr. Richard Tucker, Center for Applied Linguis 1611 North Kent Street, Arlington, Virginia, 22209, U.S.A.
Centre for Urban Educational Studies	Miss G. Robert, 34 Aberdeen Park, London N5, U
Child Migrant Education Program	Ms. Irene Donohoue, S.A. Council for Education Planning and Research, 18 Dequetteville Terrace Kent Town, S.A. 5067.
Child Migrant Education	Ms. Marylin Woolley, 200 Little Collins St., Melbourne.
Child Migrant Education	Department of Education, Blackfriars St., Chippendale, N.S.W. 2008. (Mrs. R. Strong)

The Children's Librarian	Brunswick Public Library, 223 Sydney Road, Brunswick 3056.
Clearing House on Migration Issues	133 Church St., Richmond 3121.
Community Education Centre,	Ms. Joan Bunn, Prahran High School, Molesworth St., Prahran.
Community Relations	Ms. Lorna Lipmann, 6th Floor, 99 Queen St., Melbourne 3000.
Counselling and Guidance	Mr. Barrie Dallas, Counselling & Guidance, (Preston Area), Regional Education Department Office, "Allen House", Preston Market.
Commercial Teachers' Association	Ms. Helen Shardy, Victorian Commercial Teachers Association, 304 Nicholson St., Fitzroy, 3065.
Curriculum Centre,	Ms. Penny Irving, 57 Brisbane St., Hobart 7000.
Curriculum and Research Dept.	Mr. R. Barndon, Education Department of Victoria 234 Queensberry St., Carlton 3053.
Darling Downs	Mr. Philip Kitley, Conference Convenor, Darling Downs Institute of Advanced Education, P.O. Darling Heights, Toowoomba, Q'land 4350.
Department of Education	Ms. A. Somers, P.O. Box 4821, Darwin, N.T.
Department of Education	Box J164 Brickfield Hill, N.S.W. 2000.
Department of Education	Ms. Heather Worth, T. & G. Building, Smith St., Darwin 5794.
Department of Education	Supply and Tender Dept., G.P.O. Box 897J, Hobart, 7001.
Department of Education	Ms. Christine Bernville, Inner City Education Project, The University of Sydney, N.S.W. 2006.
The Dissemination Centre for Bilingual-Bicultural Education	6504 Tracor Lane, Austin, Texas, 178721, U.S.A.
Egyptian Islamic Society	Mr. F. Ramadan, P.O. Box 329, Pennant Hills, N.S.W. 2120.
Education Department of Victoria, Special Services (Ethnic Education)	Mr. Ian Adams, Assistant Director Ethnic Educatio 200 Little Collins Street, Melbourne.
Ethnic Studies Documentation	Mr. Bill Barry, Sydney Teacher's College.
Ethnic Services Librarian	State Library of Victoria, Swanston St., Melbourne (Mr. Ivan Kolarik)
The Ford Foundation	Ms. Marjorie Martus, Program Officer, Public Education, The Ford Foundation, 320 East 43rd St., New York, N.Y. 10017. U.S.A.
Footscray Public Library	70 Buckley St., Footscray, 3011.

Goethe Institute	Mr. Arno Becker, 606 St. Kilda Road, Melbourne.
Guild Teachers' College	3 Smail St., Ultimo, N.S.W. 2007.
The Inner London Education Authority	Mr. A.R. Truman, District Inspector, The Inner London E.A. 34 Aberdeen Park, London, N.5 U.K.
Kew Demonstration Unit	Mrs. Pat Beggs, Secondary Consultant, East Kew Primary School, Kitchener St., East Kew.
Kingston College of Advanced Education	211 Childers St., North Adelaide, 5006.
Kuring-Gai College of Advanced Education	Mrs. M. Trask, Dept. of Libraries & Informati Studies, Eton Road, Lindfield, N.S.W. 2070.
Language Programs Branch	Ms. Carol Barnes, (Secretary of State) 66 Slater Street, Ottawa, Ontario, K1A 0M5, CANADA.
La Trobe University Library	Ms. Margo Hyslop, Bundoora, Victoria.
Macquarie University Library	North Ryde, N.S.W. 2113.
Macquarie University	Associate Prof. Marlene Norst, Dr. W. Coppell Mr. Paul Whelan
Migrant's Melbourne	Mrs. Malcolm, Special Services, Premier's Dep , Community Service Centre, 356 Collins St., Melbourne.
N.S.W. Department of Education	In-Service Education, Professional Services Centre, South Coast Region, P.O. Box 126, Fairy Meadow, N.S.W. 2519. (Mrs. Margaret Dea)
New Zealand Council for Educational Research	Mr. Richard A. Benton, Senior Research Officer, Head of Maori Unit, P.O. Box 3237, Wellington, New Zealand.
North Brisbane College of Advanced Education	Kedron Park, Q'land, 4031.
Nursery School Teachers' College	146 Burren St., Newtown, N.S.W. 2042.
Adult Education Centre	P.A.C.E., P.O. Box 1105, Shepparton (Mr. Ken Kennedy)
Royal Australian College of Practitioners	Dr. Andrew Prendergast, 22 Lascelles Ave., Toorak. 3142.
Social Development Unit Ministry of Education N.S.W.	Ms. Joan Bielski, Officer in Charge, Social Development Unit, 35-39 Bridge Street, Sydney
State College of Victoria, Toorak	The Librarian, 336 Glenferrie Road, Malvern.

Melbourne State College	L.W. Buckley, 757 Swanston Street, Carlton.
State Library of N.S.W.	Mr. J. MacAllister, Assistant State Librarian, Macquarie Street, SYDNEY. N.S.W. 2000.
Sydney Kindergarten Teachers' College	44 Henrietta Street, Waverley, N.S.W. 2024.
Taylors College	Ms. H. Adams, 114 Alva Road, South Melbourne.
Traralgon City Library	Mrs. D. Teasdale, Librarian, P.O. Box 423, Traralgon, 3844.
The University of N.S.W.	Mr. Jim Allen, English Department, Kensington N.S.W.
The University of New England	Dr. Helen Andreoni, Department of Romance Languages, Armidale N.S.W. 2351.
The University of Oregon	Prof. Kenneth Polk, Sociology Department, Eugene, 97403, U.S.A.
Victorian Commercial Teachers' Association	Mr. Mike Rowlands, 304 Nicholson St., Fitzroy.
Victorian Trades Hall Council	Mr. A.M. Vella, P.O. Box 93, South Carlton (54 Victoria Street)
Victorian Association for Teachers of English	185 Lygon Street, Carlton 3053.
Victorian School for Deaf Children	597 St. Kilda Road, Melbourne.
Villanova College	Mr. R.E. McDonnell, 6th Avenue, Coorparoo, Q'land, 4151.
Wollongong Public Library	Mrs. L. Slater, Crown Street, Wollongong, N.S.W. 2500.

Schools Holding Samples - All States.

Auburn North Primary School	Mrs. P.E. Lembut (Librarian) Parramatta Road, Auburn N.S.W. 2144.
Auburn Primary School	Mrs. Rutherford, Rathmines Rd., Hawthorn.
Balwyn Primary School	Mr. M.L. Bennett, Balwyn Road, Balwyn, 3103
Catherine McAuley High School	Sister Barbara McDonough, Old Windsor Roa[illegible], Westmead, N.S.W. 2145.
Cheltenham Heights Primary School	Mr. Bill Kupsch, (Principal)
Christian Brothers High School	Mrs. H.M. Oldfield (Librarian) 4 Thames St., Balmain, N.S.W. 2041.
Child Migrant Education	Ms. G. Grove, 229 Campbell St., Hobart 7000.
Coburg West Primary School	Mrs. Robin Ottrey, 12 Forster Court, Pascoe Vale South. School: Reynards Road, Coburg
Coburg High School	Miss Yvonne Novarra, Coburg H.S. Bell St., Coburg.
De La Salle College	Mr. Mahraovi, 24 Bland St., Ashfield, N.S.W. 2131.
Footscray Primary School No. 253	Ms. L. Maskrey, Geelong Road, Footscray, 3011.
Footscray High School	Mr. Bill Triksliotis, 255 Arthur Street, Fairfield.
Graham Street Primary School	Mr. Kyriacos Kyriacou, 162 Powlett St., East Melbourne.
Huntingdale Technical School	Bakers Road, Oakleigh South, 3167.
Kilkenny Primary School	Jane Street, West Croydon, S.A. (Miss T. Kapiniaris)
Kildara College	High Street, Malvern.
La Salle College	Mr. D.J. Healy, Munel St., Midland W.A.
Lyndale High School	Ms. J. Schade, North Dandenong 3175.
Mazenod College	Mrs. Patricia Kay, Kernot Ave., Mulgrave.
Methodist Ladies College	207 Barkers Road, Kew 3101.
Mooroolbark Technical School	Mr. Peter Langford, Reay Road, Mooroolba[illegible], 3138.
Moreland Primary School	Mrs. M. Hart, De Carle Street, Moreland 3[illegible]58
Myrtleford High School	Mr. P. Nero, Mummery Road, Myrtleford, 3[illegible]7.

Newlands Primary School	Mr. Rod McFarlane, Elizabeth St., E. Coburg.
Noble Park High School	Callaghan St., Noble Park, 3174.
Parade College	Plenty Road, Bundoora, 3083.
Petersham Girls' High School	Gordon Street, Petersham 2049. (Miss M. Oag)
Paisley High School	Blenheim Road, Newport, 3015.
Port Melbourne Primary School	The Librarian, Graham St., Port Melbourne, 3207
Preston North East Primary School	Mr. Gerrard Barry, Laurel St., East Preston.
Preston South Primary School	Ms. Dina Kalatyis, 824 Hotham St., Preston.
Rainbow Street Public School	Miss Margaret Mason, Randwick 2031.
Ramsgate Primary School	Mrs. Walker, Librarian, Chuter Ave., Kogarah, 2217.
Redcliffs High School	Ms. Alexandra Markovic, Redcliffs, 3490.
Richmond Primary School	Mr. F. Ludlow & Ms. Kate Stock, Highett St., Richmond.
Richmond Primary School (North)	Mrs. A. Browne, Davison St., N. Richmond.
R.M.I.T.	English Language Teaching Centre, La Trobe St., Melbourne (Ms. Diane Head & Mr. Russell Collins)
Ruthven Primary School	Ms. Lorraine Flanders, Glasgow Ave., Reservoir 3073.
St. Augustine's College	The Librarian, Alfred Road, Boookvale, N.S.W. 2100.
St. Joseph's College	Mrs. L. Sislev, 106 Holden St., N. Fitzroy, 3068.
St. Josephs (Mount)	Sister Martin Bolger, Maidstone Street, Altona West, 3018.
St. Mary's Boys Regional School	Ms. Beverley Scott, Victoria Street, West Melbourne (Howard Street 3003)
St. Mary's School	Miss Maria Minto, Mansfield St., Thornbury 3071.
St. Mathews School	Sister Carole McDonald, 95 William St., North Fawkner 3060.
St. John's Girls High School	Ms. Edith Gardner, 77 Queen St., Auburn N.S.W. 2144.
St. Joseph's School	Sister Mary Damian, Principal, 74 Rosebery Ave Rosebery N.S.W. 2018.

St. Monica's College	Davison Street, Epping, 2444.
St. Thereses School	Sutherland Street, Mascot N.S.W. 2020.
Telopea Park High School	Ms. E. Hopkins, New South Wales Crescent, Barton, A.C.T. 2600.
Thomastown High School	Ms. Mary Reid, P.O. Box 110, Thomastown, 3074.
Thomastown Primary School	Mr. Baud, 167 High Street, Thomastown, 3074.
Thornbury High School	Ms. Rosemary Burton.
Wales Street Primary School 3139 (Northcote)	Miss C. McArdle, Speight Street, Thornbury
Warrawong High School	Ms. Jayne Whiley, Cowper Street, Warrawong, N.S.W. 2502.
Waterdale Girls High School	Ms. Margaret Oates, Waterdale Rd., Heidelberg
Wesley College	Ms. N. Karabatakis, Punt Road, Prahran.
Whitefriars College	Park Road, Donvale, 3111.

CHAPTER II

EVALUATING THE MULTILINGUAL PROJECT

PHASE I

THEORETICAL FRAMEWORK

Previous research has shown that migrant children in Australia typically achieve at lower levels in school than monolingual Australian children (see de Lemos 1975, and others). The rationale for the Multilingual Project is that bilingual students are provided with learning materials in both of their languages and, at any time, they may choose the language of instruction. Therefore, students' learning is mediated by their total linguistic knowledge rather than by their skill in one particular language. The use of bilingual materials, then, may enable bilingual students to learn at a rate comparable with their monolingual peers and so help to redress the existing imbalance. The thrust of the Project is to facilitate the learning of subject matter in general, and not particularly that of language skills.

The Multilingual Project is an innovation in curriculum development based on the theory of language universals as it relates to bilingualism. In this it is particularly indebted to Fillmore's case grammar. Briefly, Fillmore (1968) suggests that the basic structure of sentences of natural languages is a set of tenseless relationships involving nouns and verbs. These relationships

> comprise a set of universal, presumably innate, concepts which identify certain types of judgements human beings are capable of making about the events that are going on around them, judgements about such matters as who did it, who it happened to, and what got changed. (1968:24)

In principle therefore, anything can be expressed and understood, within certain cultural limits, in any language. If we are concerned with the acquisition of knowledge, then the language in which it is mediated is of less importance. This has implications for learning in schools because it follows that the overriding principle in choosing the language of instruction should be its effectiveness as a mediator of knowledge and not the need to become linguistically assimilated into the dominant group. Further it follows that in the case of bilinguals either or both languages should be available in the learning situation because of the domain-specific language experiences of these children. Once learning has taken place language development can and should receive special attention. This is particularly important as there is mounting evidence that language is rooted in cognitive and pragmatic development and that balanced bilingualism is an asset, whereas asymmetrical bilingualism is not (Cummins 1978 and 1979).

Besides the above considerations, the Multilingual Project also subscribes to the tenet that the learner's attitude towards the language of instruction is of paramount importance. Ideally he should be allowed to choose the language(s) of instruction irrespective of his teacher's language skills, even if at times his choice may appear misguided, namely when he chooses to rely on his weaker language. If this happens social and psychological factors exert an overriding influence prompting the learner to emotionally reject his dominant ethnic language. Of course there are often cogent reasons why a student who needs special English tuition and attends a migrant English class will elect to study in English even if learning materials are made available in the ethnic language. He will do so because he is in the unfortunate situation where he is illiterate in his ethnic language and/or has a limited oral command of it and only knows a dialect variety. This can easily happen when a child is schooled in his second language or if schooling in L1 is interrupted and suddenly switched to L2.

Asymmetrical bilingualism can take many forms. The most damaging is the kind labelled semi-lingualism by some Finnish researchers (Skutnabb-Kangas & Toukomaa 1976; Toukomaa & Skutnabb-Kangas 1977). A semilingual child's language development is such that he cannot use either of his two languages as efficient tools for learning. Linguistic minority children often react highly emotionally to situations where they are expected to learn or use their ethnic language because they fear that their lack of competence in L1 will be discovered. If bilingual education is not to prove counterproductive it ought to be made optional. The parallel texts of the Multilingual Project admirably serve this purpose.

The Multilingual Project places emphasis on subject matter learning. Expectations are that gains will also be made in language competence, but not necessarily in both L1 and L2, as students may choose to learn monolingually, in itself a legitimate strategy. We were also aware that because of social reasons monolingual English speakers would join the Project using the English versions so that bilinguals could learn side by side with monolinguals. Despite the emphasis placed on subject matter learning and on allowing students free language choice and the care taken to convey this information to participating teachers, there was clearly the possibility that this proviso might be contravened.

One would assume that evaluation procedures adopted by bilingual education programs overseas could be adapted to the needs of the Multilingual Project. However, this is not the case. This can be explained by the fact that in terms of purpose, scope and student population there are significant differences. We shall use as prototypes the Spanish/English programs described by Cohen (1975) for the U.S. and the French/English immersion programs described by Lambert and Tucker (1972) and by Swain and Barik (1976) for Canada to show that their evaluation procedures are not relevant to the Multilingual Project.

Both programs serve fairly homogeneous groups with regard to language dominance (Spanish and English respectively) and bilingual competence, whereas the Multilingual Project's school population is heterogeneous in both these respects. This population includes migrant children who have not achieved full competence in English and therefore do not make good progress at school; those who are recent arrivals and have experienced part of their schooling abroad; and those who have a strong native language background in their home and neighbourhood; migrant children who are competent in English and in their mother-tongue; English-speaking students learning a second language and/or just studying a subject. Further, overseas programs offer a total curriculum over an extended period of time, specifying the language of instruction throughout the school day. The Multilingual Project is only a curriculum component, more of an addition to ongoing activities than a substitute for a particular component. Further, it is optional with respect to language(s) of instruction. Accordingly, research questions are significantly different from those posed by the Americans.

Cohen lists the following questions for the Mexican American programs.

> a. Are Mexican American children who are taught the academic curriculum in Spanish and English for several years as proficient in English language skills as Mexican American children taught only in English?
>
> b. Are Mexican American children who are taught in Spanish and English more proficient in Spanish language skills than comparable children taught only in English?
>
> c. Does a bilingual program promote greater use of Spanish among its Mexican American participants than is found among comparable non-project participants?
>
> d. How well do Mexican American children following a bilingual program perform in relation to a comparison group on tests of a non-language subject matter such as mathematics?
>
> e. What effects does a bilingual program such as this have on the measured academic aptitude of the Mexican American children involved?
>
> f. How do Mexican American children in a bilingual/bicultural program for several years value the Mexican and Anglo cultures as compared to children who do not receive such a program?
>
> g. What effect does bilingual schooling have upon children's school attendance and attitudes toward school?
>
> h. Are the language attitudes of Mexican American parents with children in a bilingual program for several years affected by their children's participation in the program? (1975:79-80)

Swain and Barik's list for Canada is in some respects comparable. They asked

> (1) whether the French immersion program is actually "working", that is, whether pupils enrolled in the program do become more proficient in French than they would if they were following the regular school curriculum, in which instruction is in English and French is taught as a school subject, and (2) whether such instruction carried out entirely in a language other than the child's native language has harmful effects. Is greater mastery of

> French achieved at the expense of lower achievement in other areas such as reading and arithmetic? Can a child learn arithmetical concepts through a second language as well as through his own language? Also, how does such instruction in a language other than his own affect the child's cognitive development, as measured through the tests of mental ability? (1976:1)

Although Swain and Barik do not mention attitudes to language, Lambert and Tucker (1972) have paid attention to this question.

The research questions of the Multilingual Project differ from the foregoing in that they are much less ambitious. Questions concerning conceptual development are restricted to the subject matter contained in the unit materials; those referring to language learning to subjective assessment. On the other hand great emphasis is placed on exploring student/teacher/parent satisfaction and the reduction of difficulties created by a multilingual situation.

The U.S. and Canadian evaluations have followed a fairly traditional research model using control groups and batteries of standardized mental ability and achievement tests. The latter included tests of word knowledge, word discrimination, listening comprehension, reading, arithmetic.

In contrast to this approach the Multilingual Project has developed a design that may be seen as 'illuminative research' in the sense used by Trow (1970) and Parlett and Hamilton (1972). Lewis (1975) supports such an approach.

> Because research into bilingualism and bilingual education has depended on contributions first from philosophy, and then successively from philology or linguistics, psychology and sociology it has tended to adopt the assumptions of those disciplines and to work according to models they have developed. There is no doubting a current crisis in education, arising to a considerable extent from controversy about ways of handling the special problems of minor-

ities, powerful interest groups such as social-class, ethnic, professional etc., who have begun to flex their muscles and to demand recognition of their unique characteristics. Consequently, there appears to be a "loosening of the stereotypes of investigation and the possibility of a fundamental shift in the paradigm of research" .... It should not be difficult for us now to see the limitations of our current paradigm. Several changes have helped to make our approach less mechanistic and deterministic. The belief in the possibility of total explanation has been eroded if not abandoned. Second, subjective as well as objective measurement components in evaluation receive greater approval. To a considerable extent the study of education has liberated itself from the physical sciences and is less committed to mechanistic models. Third, science has tended to adopt a more integrative approach whereby wholes tend to be conceived less frequently as simply the sum of their parts. No longer should the total of the education of a bilingual child to be conceived as the sum of the periodic measures taken of his development. Fourth, it is now realised that in the social sciences particularly as concerns main stream as well as minority education, it is not a stable reality that we study. Unlike material sciences where the relevant phenomena remain relatively unchanged in education we are not concerned simply with the experience of change but with the search for it. Change is of the essence of the reality to which a bilingual education has to accommodate. It is concerned to promote emerging ethnic groups and their languages or to preserve them in a rapidly changing universe.

Finally the study of bilingual education cannot ignore the phenomenon of consciousness. Bilingual education study is not justified simply because "it is able to tie together by regular relationships concrete aspects of social life ... Men use their capacity to act not in response to their objective environment, in which case their actions would be explainable and predictable on an objective basis, but in response to their perception and appraisal of that environment" (de Jouvenal) .... The very inspiration of bilingual education is humanistic rather than mechanistic. For that reason we should be guided by Aristotle: "Look for precision in each class of things in so far as the nature of the subject permits". (1975:16-17)

EVALUATION OF THE MULTILINGUAL PROJECT

The preliminary evaluation which assessed the Project on qualitative data to see if teaching materials are useful, if they are suitable, of the right quality and so on is termed Phase I. Objective tests of language development were not used and it is not envisaged that they will be used. There are several reasons for this. Feelys' (1973: 150) statement about Scope, Stage 1, that "there is no simple linguistic objective at which the team could aim", is applicable to the project. Further, we agree with Pearce (1973) who expounds in some detail on linguistic grounds why we should not try to assess communicative competence. More significantly perhaps, our measurement would be wasted because we have no control over other sources of language learning which could influence results. Even if language gain could be demonstrated, the Project could not claim responsibility for it.

The instruments used in Phase 1, then, were questionnaires, interviews, oral and written reports, and observation of classes. Such an analytic approach depends more on emerging consensus; "it seeks agreement rather than proof" (Jenkins 1973). The use of different channels should encourage confidence in the conclusions reached (see Tawney 1973).

Phase I was a qualitative investigation of what was happening in and outside the classroom. The report for Phase I is based on questionnaires and interviews given to students, teachers and parents. Besides the routine identification of respondents with respect to sex, age (where appropriate), schooling, country of origin, language(s) and, if bilingual, language use and literacy, information was sought on the following:

a) general satisfaction with the Project;

b) effective subject matter learning;

c) L1 and L2 development;

d) use of materials with respect to classroom organisation and their bilingual format;

e) attitude to language maintenance;

f) attitude to learning in general;

g) parental involvement;

h) general school involvement;

i) evaluation of Project units, e.g. language complexity, content, format, ancillary materials;

j) teacher involvement, e.g. provision of additional activities.

Visits to schools, reports from teachers and videotapes documented the flexibility of the materials. They were used, as intended, in whole classroom situations involving monolingual English speakers, mixed ethnic groups, and pure ethnic groups, by individual students, and for teaching the ethnic community language.

The Sample

119 students with a non-English speaking background participated in the Project in Terms 2 and 3, 1975. Respondents were chosen on the basis of availability; they were not randomly selected. Nevertheless, they were a fairly representative sample of the participating bilinguals in that they included speakers of all the languages in which the Project materials were available. Further, all types of schools were represented: High Schools (Brunswick East, Deer Park, Coburg, Upfield, Westall), Technical Schools (Coburg), Primary Schools (Newlands) and Independent Schools (Academy of Mary Immaculate, Fitzroy).

The children's countries of origin were predictable. Nearly half of them were born in Australia. The other countries included Italy, Greece, Turkey, Cyprus, Yugoslavia, Egypt, Lebanon, Syria, Portugal, Chile and other South American countries.

For the rest of the report it is to be understood that all findings were based on subjective data. The bilingualism of students showed the following pattern.

English dominant	51 students	(43%)
L1 dominant	40 students	(34%)
No difference	24 students	(20%)
No response	4 students	(3%)

The ethnic language was used with parents by 87 per cent of the sample and with relatives and family friends by 80 per cent. On the other hand, English was used in similarly high proportions with siblings, with school friends and in the neighbourhood. This is an interesting finding because at least two of the schools, Brunswick East High School and the Academy of Mary Immaculate, had a large intake of children of well established Italian families who clearly perceived themselves as English dominant. Home-based bilingualism is a reality to be taken into account, particularly if it is strengthened by a favourable attitude towards L1 learning. Fifty-eight per cent of the students indicated that they were studying L1 and 34 per cent that they would like to, so that a total of 92 per cent were supported or would have liked to be supported in their language maintenance: surely, a cogent argument in favour of bilingual education.

At the time of carrying out this survey the Multilingual Project relied largely on written materials. (The production of taped versions of the texts is now in progress.) To use the materials effectively the students required some competence in the written form of at least one language and preferably both. All students indicated that they were literate in English to some extent. As to L1, 91 per cent could read their ethnic language and 87 per cent could also write it. In this sample literacy was weaker in L1 and L2. Further, questions on literacy revealed that most of the students who indicated that they could read their ethnic language well (59 per cent) made use of this skill. About 50 per cent used it for reading books, magazines and newspapers (50, 41 and 53 per cent respectively).

Several questions were asked to obtain as much information as possible on the reaction of students to the project units and to counteract any bias resulting from the framing of questions.

When students were asked whether they or their friends might like similar booklets on other topics they were singularly reluctant to commit themselves. Most of those who did not give a positive response answered "I don't know". (As 82 per cent of the respondents had studied only one or two units, they may have been unused to the idea of working with texts in two languages, and may not have been sure what other booklets in the series would be like.) Three-fifths wanted more units for themselves, half thought that other migrants would want them and one-third that monolingual Australian students would. As the booklets are intended to be used bilingually, migrant students might think that they are not relevant to Australians. Previous research shows that immigrant adolescents expect little concern for languages from their Australian peers (cf. Rado 1976).

Although as mentioned earlier, 92 per cent were learning or were in favour of learning L1, 29 per cent thought learning English was more important than working with the booklets. This finding does not necessarily reflect dissatisfaction with the Project so much as an urgent need to learn English due to the organisation of our schools. Apparently these students did not recognise the language teaching potential of the units or did not know how to exploit it.

One-third indicated that another member of the family had read one of the booklets. This proportion compares favourably with the figure of 7 per cent for monolingual Australians who also used the materials.

It is hoped that both these proportions will increase as the Project is eminently suited to establish links between home and school. Indeed it might be worth mentioning the results of 52 questionnaires completed at the Academy of Mary Immaculate by migrant and Australian parents in August 1976 which show that all but five parents were familiar with the materials.

Another possible benefit of using bilingual booklets was that children would gain greater respect for their ethnic language and by implication greater self-respect if they were able to use their L1 as the medium of formal study. One-third of the students considered that their L1 was "more important" after using the booklets.

While the Project's focus is on conceptual development, the materials also offer an opportunity for developing language skills. Several questions were aimed at probing students' appraisal of the progress they had made in conceptual and language learning.

It was pleasing to note that 87 per cent of the students thought that the booklets were instrumental to learning new concepts. Over half considered that the materials had helped them with their English and a little less than half thought they had helped them with their L1 (55 per cent and 44 per cent respectively). These findings closely match expectations. They are further supported by the reactions of the parents mentioned earlier. All but five, who consistently responded with "I don't know", thought that the materials stimulated subject matter learning as well as language learning.

Another encouraging finding was that 57 per cent of the 1975 student respondents felt the materials had helped them with taking part in lessons. (The proportion is more significant than it appears as in some cases the booklets were used by individuals in isolation, thereby reducing the number to whom the question was relevant.) When asked about the level of difficulty of the texts (Animal Families, Traffic Accidents, Myths of the Australian Aborigines) the responses indicated, overall, that the level of language difficulty was judged reasonably well for the 10-14 age group, particularly for students in Forms 1 and 2.

In order to establish the characteristics of students with a favourable attitude to the Multilingual Project and by implication to bilingual education, the findings of some questions were cross-tabulated. For instance, we wanted to see whether variables such as grade or form, sex, literacy, language spoken in the home, language studied formally, and length of residence in Australia played a part in the students' perception that they profited from materials such as these and further, whether perceived profit was linked to a general favourable attitude expressed in terms such as wanting to continue with this type of learning. Results show the need for further probing.

A generally favourable attitude to the Project, expressed by wanting more booklets, was associated with the students' perception that the booklets had helped them to take part in lessons and to learn new things. There was also some relationship between wanting more booklets and feeling that the booklets had helped with learning English. There was, however, no significant relationship between enthusiasm for the materials and sex, literacy, grade at school, difficulty experienced in using the texts, ethnic language, degree of bilingualism or language dominance. Degree of literacy in English was not related to the students' opinion about the booklets at all; children who were not highly literate in English were as likely to respond that the booklets had helped them with learning English, their ethnic language and other new things as were the children who considered themselves completely literate.

It appears, then, that the quality of the materials and the teaching method they embody are the overriding factors influencing the students' perceptions of their usefulness. The booklets are equally acceptable to balanced bilinguals, to students who rely predominantly on their L1 and to English dominant students.

Perceived gains with respect to subject matter learning were positively associated with using L1 with parents (the second most significant relationship in the study). Further, they were positively related to studying L1 (the relationship was not quite significant). This supports the view that for students who have regular contact with L1, bilingual education stimulates learning.

There was a relationship between speaking the L1 with parents and feeling that the booklets helped with L1 learning, while on the other hand, English dominance was related to feeling that the booklets helped with English learning. This may have been because the first group used the L1 version more extensively, while the English dominant group relied more heavily on the English text. Presumably, the opportunity for language choice was exploited (i.e. children frequently turned to the booklets written in their preferred language) with positive effects on the learning of this language.

This implies that in some cases the booklets may be conducive to the development of one language only, because some children will rely on one of the booklets to the exclusion of the other. This may disappoint those teachers who wish to use the booklets to teach a specific language, whether English or the ethnic language. However, the Project aims to provide children with the opportunity of using booklets in their preferred language. This is based on the belief that subject matter is not as readily absorbed when the student is forced to work in his weaker language as when he has a choice of languages, and it is therefore felt that the student should make the decision as to language used.

We can see merit even in strengthening only one of the bilingual's languages whether ethnic or English, dominant or weak. Strengthening the dominant language need not be at the expense of the weaker language; in fact concepts first understood in the stronger language are likely to be transferred to the weaker one. The use of bilingual books encourages this process. During interviews several students said that they read through the books in their dominant language first, in order to understand the meaning, and were then able to cope with them in their other language. Teachers reported that some students who worked on the English version booklets at school took ethnic language booklets home with them in the evening so that they could go over the work in their L1 with the help of their parents. These examples show how working in the dominant language may encourage learning in the weaker language as well.

In most cases there was no connection between the students' reactions to the Project booklets and the length of time they had spent in Australia. When asked whether the booklets had helped with learning L1 and English, taking part in class and learning new things, there was no significant difference between the responses of new arrivals and of those who had been in Australia for some time: most thought that the booklets had helped them. These findings were encouraging, as they suggest that the booklets may be profitably used by students, irrespective of how long they have resided in this country.

When the students were asked whether their perception of their L1 had changed after using the booklets, an interesting pattern emerged. New arrivals and those at the other end of the scale, who had been in Australia for more than 12 years (or from birth), thought after using the booklets that L1 was "more important". Those resident in Australia between 8-11 years perceived no change. It would be interesting to find out why the latter group has reacted differently and why the Australian-born and the new arrivals have changed their perception of L1 in the same direction.

One question asked whether the students considered that learning English or working with the booklets was more important. L1 dominant students were more inclined than others to opt for learning English. They also tended to find the English text too hard, but thought that the L1 text was easy and could be made harder. This indicates on the one hand that they were insecure in their English competence which they thought could be best upgraded by conventional English language instruction. On the other hand it shows that L1 dominant students can linguistically cope with the texts. This suggests that their reading skills in their own language are comparable with the English reading skills of their Australian peers.

One can presume that language maintenance is of little concern to the new arrival who wants to get on at school and therefore is anxious to learn English. As the family settles down it gains importance. Information from a group of migrant parents with Australian born children mentioned above supports this view. All but four had been resident for over ten years in Australia, the majority nearer twenty, so most of their children were Australian born. With the exception of five parents who gave no opinion, they wanted their children to be fluent and literate in their ethnic language and wished their grandchildren to learn it.

Finally we have collected anecdotal evidence by asking respondents open-ended questions and by participant observation. It is laborious to process such data but it has the advantage of reflecting what participants deem important. This technique sometimes brings aspects to light that might have gone unnoticed.

About half of the students in the 1975 sample took the opportunity of writing a comment when completing the questionnaire. Here is a selected sample of the comments of some 13 to 16 year old students. (Note: some of the comments have been translated into English but apart from that they are given verbatim.)

Spanish boy: The book is very important.

Serbian girl: I would like to wish you luck with all things that you going to do.

Spanish boy: The book is good for me.

Turkish boy: I would like to say that would you please bring some more books about these Animal Families and the one in our language.

Greek boy: I want to understand the Greek language better. Thank you very much.

Italian boy: I want more booklets because I like them.

Turkish boy: Me and my friend would like more of these booklets because it helps our English a little. It would be kind of you if you make more booklets like these thank you.

Italian girl: I'd rather have Social Science in Italian and English and I think we need more Italian books.

Greek boy: I would like to read another book like those which I've read in order to help me more in Greek, in English and in speaking.

We also have some oral remarks made during interview sessions in response to questions such as "How do you feel about learning in both the ethnic language (Greek, Italian etc.) and English?" and "What else would you like to say?". Some examples follow:

Italian girl; I like it. If I don't know a word in English I'll get it in Italian.

I would like to go on having books in two languages; but harder ones. The last ones were a bit easy. I'd like a book about plants.

Greek girl: It helps you to understand things, and knowing two languages is good for getting a job.

I would like more topics, especially about other countries...like France, and Mexico; what the countries are like and what the people do there.

Spanish girl: It makes it easier to understand.

It is very important, to understand people in shops and places like that for us to understand two languages. I will always remember, never, never forget the time when I came here. I spoke Spanish because I knew no English. The children called me 'wog'. I didn't understand what they said. This is a very bad thing. I will never forget.

Serbian girl: It's good to learn Yugoslav. Also, sometimes I know a word in one language and not in another. It's good, it's O.K.

Italian girl: I think it's good. I read to my mother in Italian. It makes it easier for her to understand what's going on at school.

We can further report that at the Academy of Mary Immaculate in 1975 and again in 1976, students involved in the Project have spontaneously staged a presentation to the whole school. This has consisted of performing their own plays, and dances, composing songs, stories, and poems, making various objects such as mobiles, drawings, embroidery, masks, models and so forth, based on the units studied.

Lastly, we would like to mention some remarks made repeatedly by participant teachers. First, that they now realize that immigrant students are more capable than they had first assumed. Second, the Project materials have helped the children to develop study skills.

The Phase I evaluation constituted one approach to the problem faced by all curriculum developers and innovators, that of gathering information on their 'product', once the material is being trialled in real life teaching situations. The multi-method approach sought to spread the net widely to enable impressionistic as well as more objective data to be collected. Once the results of this process were known, significant modifications in the material, the mode of its development, the origins of resource kits and the guidelines for teachers were possible.

From this point, it became clear that data of a different type needed to be collected. As was discussed in Chapter I, there are dual expectations for the Project. It is not sufficient to seek support for the practical contribution of those bilingual materials for minority groups in Australian schools: there is a need to focus on the more theoretical aspects related to the theory of first and second language development and use as well. The present study, part of Phase II of the evaluation of the Multilingual Project, was designed to serve the latter purpose. The nature of the study will be described in the following chapter.

CHAPTER III

EVALUATION OF FACTORS ASSOCIATED WITH SUCCESS IN BILINGUAL EDUCATION

PHASE II

INTRODUCTION

The present study focussed on factors associated with success in bilingual education. The research paradigm adopted for this stage of the evaluation of the Multilingual Project was illuminative evaluation.

The research may be seen as illuminative research in the sense used by Trow (1970) and Parlett and Hamilton(1972). Its purpose was to find out how the programme affects students in a whole range of areas, in what contexts, and with what pupils. For this reason, the evaluation should be seen as formative rather than summative. Its purpose was to contribute to the understanding, effective use, and subsequent improvement of the programme, not to make some final statement about the effectiveness or ineffectiveness of a programme seen as a 'finished' product.

ILLUMINATIVE EVALUATION

Although we have described our approach to this evaluation as 'illuminative', we have not attempted to follow the dictates of any particular evaluation model. We have sought to gather as broad a range of information as we could, and to ascertain the views of all parties involved, rather than to be restricted to a smallish range of outcome measures. Our aim is to illuminate for ourselves and our readers the particular strengths and weaknesses of the multilingual materials as they are being used. Our approach owes a debt to the pioneers of 'illuminative' evaluation, even though we have probably followed paths which they would not have chosen to enter.

The term 'illuminative evaluation' arose, we believe, from work by Trow who remarked that, in order to overcome possibility of hostility or suspicion in those who have contributed to the programme being evaluated, "research on innovative efforts must be seen from the beginning as 'illuminative', rather than 'evaluative' in the narrow sense; that researchers and evaluators must forgo the dubious pleasure of awarding gold stars and demerits to academic innovators, but must try instead to serve them" (1970: 302). The original sense in which the term 'illuminative' was used in relation to evaluation captures, we believe, the spirit in which we have approached our task. We have seen our task as going beyond assessing the effectiveness of the programme, and extending to providing the kind of information which will enable those using the materials to use them more effectively.

Since its original use by Trow, the term has been taken up by a number of evaluators, its meaning extended, and its use popularized. In particular, the work of Parlett and Hamilton (1972), Hamilton (1976), Hamilton, Jenkins, King, Macdonald & Parlett (1977) and many others have had the effect of turning what began as a change in emphasis among evaluators into an evaluation movement, with all that is entailed by that.

The rush towards illuminative evaluation has had a number of causes, and chief among them would probably be a degree of dissatisfaction with the utility of purely outcome-based evaluation strategies. Parlett and Hamilton (1972) listed many deficiencies of what was at the time the traditional approach to programme evaluation and which they referred to, somewhat disparagingly, as the 'agricultural-botany' paradigm,

> 1. Educational situations are characterized by numerous relevant parameters. Within the terms of the agricultural-botany paradigm these must be randomized using very large samples; or otherwise strictly controlled. The former approach entails a major data collection exercise and is expensive in time and resources. It also runs counter to the need, widely acknowledged, for evaluation before large scale application rather than after it. The latter procedure - of strict control - is rarely followed... Even if a situation could be so unnervingly controlled, its artificiality would render the exercise irrelevant: rarely can 'tidy' results be generalized to an 'untidy' reality...
>
> 2. Before-and-after research designs assume that innovatory programs undergo little or no change during the period of study. This built-in premise is rarely upheld in practice. Yet it remains fundamental to the design, constraining the researchers from adapting to the changed circumstances that so frequently arise. It may even have a deleterious effect on the program itself, by discouraging new developments and re-definitions mid-stream...
>
> 3. The methods used in traditional evaluations impose artificial and arbitrary restrictions on the scope of the study. For instance, the concentration on seeking quantitative information by objective means can lead to neglect of other data, perhaps more salient to the innovation, but which is disregarded as being 'subjective', 'anecdotal', or 'impressionistic'...
>
> 4. Research of this type, by employing large samples and seeking statistical generalizations, tends to be insensitive to local perturbations and unusual effects. Atypical results are seldom studied in detail. Despite their significance for the innovation, or possible importance to the individuals and institutions concerned, they are ironed out and lost to discussion.
>
> 5. Finally, this type of evaluation often fails to articulate with the varied concerns and questions of participants, sponsors, and other interested parties. Since classical evaluators believe in an 'objective truth' equally relevant to all parties, their studies rarely acknowledge the diversity of questions posed by different interest-groups. (1972: 5-7)

In place of outcome-based evaluation (referred to variously as 'preordinate', 'objectives-based', 'agricultural-botany', 'psychometric', 'experimental', 'comparative', 'classical' and 'quantitative' evaluation), Parlett and Hamilton proposed an alternative paradigm, which they referred to as 'illuminative' evaluation. In their terms, illuminative evaluation

> ...takes account of the wider contexts in which educational programs function. Its primary concern is with description and interpretation rather than measurement and prediction
>
> (1972: 9)

They argue also that traditionally evaluation has paid no attention to the learning milieu - the social-psychological and material environment in which students and teachers work together. In their view, "the introduction of an innovation sets off a chain of repercussions throughout the learning milieu. In turn, these unintended consequences are likely to affect the innovation itself, changing its form and moderating its impact" (p. 12). Evaluation should aim at providing an understanding of this process. A chief concern is "connecting changes in the learning milieu with intellectual experiences of students" (p. 13)

> The aims of illuminative evaluation are to study the innovatory program: how it operates; how it is influenced by the various school situations in which it is applied; what those most directly concerned regard as its advantages and disadvantages; and how students' intellectual tasks and academic experiences are most affected. It aims to discover and document what it is like to be participating in the scheme, whether as teacher or pupil; and in addition to discern and discuss the innovation's most significant features, recurring concomitants, and critical processes. In short, it seeks to address and to illuminate a complex array of problems. (p. 9)

This, in fact, is very much in agreement with Trow's (1970) original formulation of the aims of illuminative evaluation, which Parlett and Hamilton endorse:

> Research on innovation can be enlightening to the innovator and to the whole academic community by clarifying the processes of education and by helping the innovator and other interested parties to identify those procedures, those elements in the educational effort, which seem to have had desirable results. (Trow, 1970: 302).

This is a fair statement of the aims we have pursued in the study, although we would not claim to have conducted our study entirely within the illuminative (or indeed, within any established) evaluation paradigm. Indeed, the major advocates of illuminative evaluation tend not to provide specific guidance as to methods or procedures. Instead, they distinguish three stages:

1. Investigators observe the programme.
2. Further enquiry (they select phenomena, or opinions for further study).
3. They seek to explain.

How this is done is totally dependent on the skill, insight and imagination of the evaluators. Observation, interviews with participants (students, instructors, administrators and others), questionnaires and analysis of documents and background information are all combined to help 'illuminate' problems, issues and significant programme features.

Our approach has been somewhat eclectic. It shares many of the characteristics commonly associated with illuminative evaluation, in particular, the need to recognize and document the different perspectives of the various participants in the process. We do not see illuminative evaluation as being necessarily or wholly concerned with qualitative data as opposed to quantitative data, and our study has involved the use of both. For this study, the distinction between qualitative and quantitative data was not seen as important, and in our view, to have disregarded either would have been to have unnecessarily limited the scope of our enquiry.

NATURE OF THE STUDY

The study was non-experimental since the investigators were working entirely with a volunteer sample and the experimental manipulation (random allocation and witholding) of treatments had been explicitly rejected on ethical grounds. Consequently the analysis yielded conclusions which were largely descriptive (comparisons of means and mean gain scores) and specific to the population under study (volunteers for such a programme).

The investigators chose this approach rather than the controlled-experimental type of study because the nature of the programme demands it. The materials have been made available to teachers and schools on request, and the random witholding of materials in order to achieve a right experimental design would damage relations between clients and developer and, inevitably, the programme itself. The fact that the population was restricted to voluntee is not seen as a disadvantage; in fact, the whole intent of this phase of the Project is to assess the effects of the programme on the kinds of children who are likely to volunteer (or be volunteered) for it. Its effect, on other kind of pupils, in schools where the programme may never (and perhaps should never) be used is not an issue, and has not been considered by the investigators.

AIM OF THE INVESTIGATION

1. To demonstrate gains in learning which take place as a result of the use of the multilingual units.

2. To identify the characteristics of students who profit most in terms of gain in demonstrated learning from the multilingual materials.

The following hypotheses were established to guide the investigation: For bilingual and monolingual students -

(a) There will be little or no difference between bilingual and monolingual students in demonstrated gains because bilingual materials draw on the total linguistic knowledge of the students.

(b) Null hypotheses will be tested for the factors of sex, first language, and English reading level. The expectation is that gain will not be related to the latter two characteristics because bilingual materials draw upon the students' total linguistic knowledge.

THE SAMPLE

Subjects for the study were drawn from nine high schools, two technical schools and three Catholic secondary schools in the Melbourne metropolitan area. All of these subjects had been using the Multilingual Project materials as part of their ordinary school work. Some students used the materials in both of their languages, others used them monolingually. Teachers sampled were those in charge of implementing the use of the Multilingual Project in the selected schools. Parents of students participating in the study were circulated with a questionnaire and invited to respond.

Numbers of students responding: 281
Numbers of teachers responding: 22
Numbers of parents responding: 46

As previously mentioned, the sample of teachers and pupils upon which this study was based was not chosen to be representative of any wider population. Participation in the Multilingual Project has, from its inception, been entirely voluntary on the part of the teachers involved, and project staff have felt it to be important that it should remain so. All teachers who began using the materials during the period June, 1977 to February, 1978 agreed to participate in the study, and they formed the teacher sample (22 teachers in all). Their pupils (totalling 281) became the pupil sample.

The Multilingual Project materials were developed to be used by teachers who saw a need for them, rather than by all teachers, or by groups of teachers selected for the purpose. Thus we contend that the sample of teachers and pupils used in this study, while not randomly representative of some clearly defined population, is likely to be representative of the types of teachers and pupils who are likely to use the materials, given their present mode of dissemination.

This, of course, leaves us with some difficulty in estimating the degree of generalizability to teachers and pupils outside our sample, who might be considering the use of these materials or of materials like these in their classes. In these circumstances, we feel the most appropriate course to follow is to describe with some care the characteristics of our sample, having in mind that teachers who feel that they and their pupils share sufficient of those characteristics may feel inclined to be guided by our findings, at least tentatively. This is the purpose of the sections which follow.

THE TEACHERS

Twenty two teachers joined the Project during the time of the study. They taught at 14 different schools, situated in the inner suburban areas of Melbourne, and the northern and western industrial suburbs. Most of these are areas of relatively high migrant density, and typical of the areas in which the materials have previously been used, and in which we would expect them to be used in the future. The sample of schools contained High Schools (9 Technical Schools (2), and Catholic Colleges (3).

TABLE 3.1

TEACHER'S COUNTRY OF BIRTH

Country	No. of Teachers
Australia	11
United Kingdom	4
Europe	2
Asia	2
Other	2

Only half of the teachers were Australian born, but another few were immigrants from the United Kingdom, and would not have experienced the difficulty of settling into a new country and coping with an unfamiliar language. The language background of the teachers is outlined in Table 3.2

Although, as will be detailed later, their classes contained large proportions of migrant children, the teachers themselves were mostly native English speakers. Over half of them were able to speak a second language, but in the majority of cases the second language was French. This almost certainly derives from their own secondary schooling, and may not be a great amount of help to them in dealing with students whose languages other than English are predominantly Italian, Spanish, Greek and Arabic. When asked "Are you studying a migrant language" the teachers' responded as shown in Tables 3.3 and 3.4.

TABLE 3.2

LANGUAGES SPOKEN BY TEACHERS

Language spoken	As native language	As second language	As third language	As fourth language
English	18	3		
Italian		1		
Greek	1	1	1	
Spanish		2		
French		6	2	1
German			2	
Indonesian		1		
Dutch	1			
Chinese	1			
Other				1
Totals:	22	14	5	2

TABLE 3.3

TEACHERS STUDYING MIGRANT LANGUAGES

Response	Number
Yes	4
No	7
Have done so previously	2
Firmly intend to	1
Would like to	6
No response, or unclear	2

TABLE 3.4

WHICH MIGRANT LANGUAGE

Language	Number
Italian	2
Greek	6
Spanish	3
French	1
German	1
Hebrew, Yiddish	1

Although seven of the 22 teachers responded negatively, a majority either were studying a migrant language, had done so previously, or indicated that they would like to. The size of the last category may indicate a potential demand for courses for teachers in migrant languages, the learning of which could possibly be of more assistance to many teachers than much of what currently passes for in-service education. The most popular migrant languages, not surprisingly with this sample of teachers, appear to be Greek, Spanish and Italian. It could be worth noting that, in this study, many (perhaps most) of the classes contained pupils with a variety of language backgrounds, so that the learning of a single migrant language would only be sufficient to enable a teacher to communicate with some of his or her pupils in their native language.

Teachers who have a language other than English seemed willing enough to use it in explaining things to students where possible, and just on half of the 22 teachers indicated that they did. It might be added that the multilingual materials, when used as intended (with the pupil referring to two language versions) enable limited communication to take place on the subject-matter being taught, even when the teacher and pupil do not share a common language.

By and large, the teachers had been given no particular preparation in their teacher-training courses for migrant teaching (15 out of the 22 had taken no components at all in their teacher-training concerned with migrant education). Their concern about the problems encountered in teaching migrant children is evidenced by the fact that, since completing their training, a clear majority (16 out of 22) had attended workshops, seminars, etc. concerned with migrant education. Further support for this is provided by the fact that they had decided to seek out and use multilingual materials; teachers without some degree of awareness and concern would have been unlikely to have done this. In this respect the 22 teachers in our sample may not have been typical of teachers of migrant children in general.

The teachers in the sample were predominantly female (19 female, 3 male), and taught a variety of subjects (see Table 3.5), not including mathematics. (The subsequent release of a unit entitled Computers may bring the materials to the attention of mathematics teachers). It is worth noting that just on half of the sample were involved partially or totally in teaching English as a Second Language.

TABLE 3.5

SUBJECTS TAUGHT BY PARTICIPATING TEACHERS

Subject taught	No. of teachers
English as a second language	7
Humanities	3
Physical sciences	2
Humanities plus social sciences	4
English as a second language plus other	4
Not indicated	2

TABLE 3.6

AMOUNT OF TEACHING EXPERIENCE

Number of years	Teachers
Up to 1	2
Up to 2	4
Up to 4	3
Up to 10	10
Over 10	1

As shown in Table 3.6 the teachers involved were relatively inexperienced, with only one having more than 10 years' teaching experience. Nine would be regarded as "young teachers", having four years' experience, or less. Could it be that younger teachers are more willing to experiment with newer curriculum materials such as these? Or that younger teachers have entered the profession at a time when social concern and perhaps even teacher education programmes are beginning to focus on the problems faced by migrant children in our schools? Whatever the reason, the relative youth of our sample provides some cause for encouragement.

Although 15 out of 22 had taken no components at all in their teacher-training concerned with migrant education (see p.59), teachers with less than 10 years' experience may have had their attention drawn in sessions concerned with English as a Second Language, Modern Language Method, Individualized Instruction etc. to the possibility of capitalizing on migrant students' knowledge of their first language.

THE PUPILS

The pupils were drawn from 11 schools, distributed as shown in Table 3.7.

TABLE 3.7

DISTRIBUTION OF PUPILS ACROSS SCHOOLS

School	No. of Pupils
1. Eastern outer-suburban High School	7
2. Western outer-suburban High School	2
3. Inner-suburban High School	10
4. Inner-suburban High School	24
5. Inner-suburban High School	8
6. Roman Catholic Girls School	78
7. Roman Catholic Girls School	98
8. Western outer-suburban Boys Technical School	6
9. Northern suburban Boys Technical School	2
10. Inner-suburban Boys Technical School	33
11. Inner-suburban Boys Technical School	13
Total:	281

The sample was to a large extent dominated by two Roman Catholic Girls' Schools, each with large (predominately Italian) migrant intakes. This clearly limits the generalizability of our work, but was unavoidable given the decision to rely wholly on volunteers. Other pupil characteristics are summarized in Table 3.8. The most notable feature is the preponderance of boys over girls, but this is not surprising given the selection of schools.

TABLE 3.8

CHARACTERISTICS OF PUPIL SAMPLE

Characteristic	Percentages (N = 281)					
Grade Level	Grade 7	Grade 8	Grade 9	Grade 10		
	84.7	6.0	8.2	1.1		
Age	11 yr.	12 yr.	13 yr.	14 yr.	15 yr.	16 yr.
	0.4	38.8	44.5	8.2	5.3	1.8
Sex	Male	Female				
	29.2	70.8				

Although most of the pupils were born in Australia, a clear majority were the children of migrants, nearly all of whom came from countries where English is a second language only (see Table 3.9).

The data in Table 3.9 reflect the post-war immigration patterns, particularly in the respect that children of European parentage (particularly Italian) were mostly born in Australia, whereas for the more recent waves of immigration (Latin-American, Middle Eastern and Mediterranean), most of the children are themselves immigrants, which is a very different situation. In all, 37 percent of the sample were foreign-born, compared with 70 percent of mothers and 73 percent of fathers.

TABLE 3.9

COUNTRY OF BIRTH; PUPILS AND THEIR PARENTS

Country of birth	No. of pupils	No. of fathers	No. of mothers
Australia	177	75	85
British Isles	2	11	7
Italy	6	73	63
Greece	7	12	12
Cyprus	12	11	11
Yugoslavia	9	13	11
Turkey	7	8	8
Lebanon or Syria	11	14	14
Egypt	4	5	6
Spain	3	3	3
Latin America	29	24	29
French-Speaking	6	6	7
Germany or Austria	–	–	2
Malta	–	3	3
Holland	–	5	7
Czechoslovakia	1	1	1
Hungary	–	4	2
Poland	1	2	–
USSR	–	–	1
India	1	1	2
Other Asian	3	4	4
North America	–	2	1
African	1	1	1
Other	1	1	1

In the questionnaire, pupils were asked to indicate their own first language, along with those of their parents. The results are summarized in Table 3.10. Roughly speaking, about half of the children spoke English before any other language, whereas English was regarded as the first language of only about one-third of their parents. The variety of languages is considerable.

TABLE 3.10

FIRST LANGUAGE: PUPILS AND THEIR PARENTS

First Language	No. of pupils	No. of fathers	No. of mothers
English	136	85	95
Italian	47	76	64
Greek	19	20	21
Croatian	2	3	3
Serbian	–	1	–
Turkish	10	11	12
Arabic	14	17	18
Spanish	32	27	32
French	4	6	6
German	1	–	2
Maltese	1	3	2
Macedonian	4	5	4
Czech	–	1	1
Hungarian	3	4	3
Polish	–	2	–
Dutch	–	5	7
Chinese	1	1	1
Other	7	14	10

Interestingly, while 136 of the 281 pupils regarded English as their first language, 191 said that English was the language they knew best, indicating that for more than 50 of them, English had become their major language. This is understandable, given that only a small number of the pupils were recent migrants (see Table 3.11), and two-thirds of them either born in Australia, or have lived here for ten years or more.

TABLE 3.11

NUMBER OF YEARS IN AUSTRALIA (STUDENTS)

Years in Australia	Percent
1 year or less	14.1
2-3 years	8.6
4-9 years	11.2
10 years or more	66.1

Many of the pupils appeared to be genuinely bilingual. When asked to describe their ability to read and write in English and in other languages, their responses were as shown in Table 3.12.

TABLE 3.12

ABILITY TO READ AND WRITE IN ENGLISH AND OTHER LANGUAGES

Self-rating of ability	Reading English	Reading Another Language	Writing English	Writing Another Language
Very well	177	72	203	69
Adequately	67	46	40	50
Not very well	34	63	35	52
Not at all/ no response	3	100	3	110

When the categories "very well" and "adequately" are combined, the responses are extremely consistent. Eighty seven percent read and write English very well or adequately, while 51 percent read and write another language very well or adequately. When asked what languages they spoke, of the 281 pupils, 162 nominated two languages, and 28 nominated three.

Within the family, English and other languages appear to be used to roughly equal extents. Table 3.13 summarizes the pupils' responses to a series of questions concerning language use within the family and at school. Communication from parent to child was mostly or wholly in English in just half of the cases, whereas communication from child to parent was slightly more likely (55 percent) to be mostly or wholly in English. These percentages were markedly similar for mothers and fathers, although a higher percentage of mothers than fathers were restricted to their other language (29.5 percent to 21.7 percent). Mothers confined to the home with young children frequently find the acquisition of English language skills very difficult.

It is also worth noting that in about one-third of cases, communication between parent and child is bilingual, and that this is slightly more common between father and child than between mother and child. The children appear flexible in their use of language, speaking wholly or mostly English to their school friends and siblings, but accommodating to the languages of their parents and relatives where necessary. The ability to draw upon communication skills in two languages is seen as an important aspect of the Multilingual Project materials.

TABLE 3.13

LANGUAGE USE WITHIN FAMILY AND AT SCHOOL

Language Spoken	Percentage response[1] Only English	Mostly English	Mostly another language	Only another language
By father to child	35.2	14.2	23.5	23.1
By child to father	43.8	12.1	18.1	21.7
By mother to child	37.0	11.4	20.3	29.5
By child to mother	44.1	11.0	17.1	25.6
By child to siblings	61.6	12.8	10.0	9.6
By child to relatives and friends of parents	43.1	12.8	21.4	21.0
By child to school-friends	75.1	11.0	5.7	3.6

1. Percentages add to less than 100 because of a small percentage of non-response (3.5 percent overall). Non-response would be appropriate in the case of only children or single-parent families.

The opportunity to speak and listen to their other language is not matched by the experience of reading in that language. Table 3.14 demonstrates that their reading is overwhelmingly in English. This may reflect the limited availability of non-English reading materials in Melbourne, as well as the fairly rapid "Australianization" of the children of migrants.

That native language maintenance is a matter of concern is evidenced by the fact that 177 pupils (63 percent of the sample) described themselves as interested in studying their native language, even though just on half were actually doing so (100 at their schools, 16 at another school, and 21 at home). It may be that some of the popularity of the Multilingual Project materials is

TABLE 3.14

LANGUAGES USED IN READING

Reading	Percentage response[1]			
	Only English	Mostly English	Mostly other language	Only other language
Newspapers and magazines	71.2	14.2	6.8	5.3
Books	70.1	16.4	7.5	3.9

1. Excluding 2.3 percent non-response.

attributable to a desire on the part of migrant parents and their children for native language maintenance.

THE PARENTS

A sample of 46 parents (20 mothers and 26 fathers) completed a questionna which gave us valuable information concerning the units, how they were used, and how parents reacted. Of the 46, only two fathers and four mothers were Australian-born, the remainder coming mostly from Italy (13 fathers and 11 mothers) with smaller numbers from Greece, Cyprus, Yugoslavia, Turkey, Lebanon Syria, Egypt, Spain, Malta and Latin America. The sample contained a higher proportion of recent migrants, with 45 percent having been in Australia less than three years. Apart from the Australian-born parents, all mothers' and fathers' native languages were other than English, and 27 used a dialect (12 always and 15 sometimes).

As a group, they used English much less than their native languages, as shown in Table 3.15. Few used English when talking with their spouse and many more used English talking to their children — an indication of the children's influence on their parent's language habits. Clearly the parents

TABLE 3.15

LANGUAGES USED BY PARENT SAMPLE

With	Only English	Mostly English	Mostly Other language	Only other language
Spouse	3	4	11	25
Children	4	10	10	18
Rest of Family	4	3	14	20
Friends	4	4	15	19
Other people	7	11	11	9

friends are largely within their own language group, while the children have been exposed to a wider variety.

Clearly the parents had retained strong emotional ties to their homelands. In the 46 families, 7 husbands and 7 wives had actually visited their homelands; 30 of the 46 husbands and 32 of the wives expressed a desire to return. There was considerable desire for the children to speak their parents' languages (33 husbands and 32 wives), and although some were undifferent ("it doesn't matter") only one person (a husband) did not want his child to learn the parents' native language. Equally widely held were the views that the children should be able to read their parents' native language, and that their grandchildren should be able to speak it. These views are summarized in Table 3.16.

As a group, the parents placed a high value on maintenance of their native language. The children of 35 of them were learning their own native language (mostly at school, but in eight cases at home, and in five cases by attending special classes). The parents did not rate their English language skills highly (see Table 3.17).

TABLE 3.16

PARENTS' VIEWS CONCERNING NATIVE LANGUAGE MAINTENANCE[1]

Proposition	Husbands			Wives		
	Yes	No	Doesn't matter	Yes	No	Doesn't matter
Children should learn to speak parents' native language.	33	1	4	32	6	2
Children should learn to read parents' native language.	35	0	4	36	0	3
Grandchildren should learn to read parents' native language.	32	1	4	35	3	1

1. Omitted from the table are "don't know", "not applicable" and simple non-response, which ranged in frequency from 6 to 9 for each proposition.

TABLE 3.17

PARENTS' RATINGS OF THEIR OWN ENGLISH LANGUAGE SKILLS

Speak English:	Mothers	Fathers
Very well	8	7
Adequately	11	9
A little	10	19
Not at all	16	8
Did not respond	1	3

Of the 46 respondents, 22 had seen the Multilingual Project units, and 10 said that they had helped their children with them. Exactly half of them (23) said that their children discussed their schoolwork with them every day, and another 14 quite often. Only nine said that this rarely or never took place, indicating that the group of parents contacted had a fairly high degree of interest in their children's schoolwork.

Asked about how helpful they thought the Multilingual units were, 20 thought they were most helpful in learning English, 3 in learning their other language, and 7 thought they were equally helpful in both. Other aspects of the perceived helpfulness of the units are summarized in Table 3.18.

TABLE 3.18

PARENT'S VIEWS ABOUT HELPFULNESS OF MULTILINGUAL UNITS

Helpfulness in:	Very helpful	A little	Not at all	Don't know
Learning facts	24	11	3	8
Attitude to school	15	10	4	17
Understanding schoolwork	18	11	4	13

These generally positive reactions from parents were confirmed by the parents responses to a number of specifically attitudinal questions which were put to them. These included whether they wanted their children to continue with further multilingual units (27 "yes", 2 "no", 17 "don't know"), and whether they thought bilingual education was good for their children (38 "yes", 0 "no", 7 "don't know"). To confirm the latter result 39 of the 46 wanted their children to work bilingually at school (12 in all subjects, 22 in some subjects, 5 in one subject only).

Clearly we are looking at a group of parents which is quite strongly committed to the maintenance of their native language and their views about the Multilingual Project, as well as their hopes for it must be interpreted in this light.

LOCATION OF SCHOOLS

The areas in which the schools were located are designated in the 1976 Census as (1) Brunswick, (2) Coburg, (3) Oakleigh, (4) Collingwood, (5) Fitzroy, (6) Footscray, (7) Hawthorn, (8) Moorabbin, (9) South Melbourne, (10) Springvale, (11) Broadmeadows, and (12) Sunshine.

From Table 3.19 it can be seen that in one area, Brunswick, the overseas born population exceeded 40 percent. For six areas, the proportion exceeded 30 percent. Sunshine had a quarter of its population born outside Australia and the United Kingdom. South Melbourne and Broadmeadows had more than 20 percent in that category. Only for Hawthorn and Moorabbin did the proportion of the population of overseas born fall below 20 percent. These figures may be underestimated because it is known that on the Census forms numbers of people do not state where they were born.

These figures indicate the likelihood that significant numbers of children from families residing in areas 1, 2, 3, 4, 5, 6, 9, 10, 11 and 12 will be exposed to a language environment in the home of either minimal English or with everyday usage of at least one language other than English. It might be expected that schools drawing their populations from these areas would have an interest in curriculum materials facilitating teaching of multilingual classes by a monolingual teacher. It is interesting to note that two areas which did not have populations with a high proportion of overseas-born, also

TABLE 3.19

PER CENT POPULATION FIGURES FOR CENSUS AREAS IN WHICH STUDY SCHOOLS WERE LOCATED

AREA

	1 Brunswick	2 Coburg	3 Oakleigh	4 Collingwood	5 Fitzroy	6 Footscray	7 Hawthorn	8 Moorabbin	9 Sth.Melbourne	10 Springvale	11 Broadmeadows	12 Sunshine
r cent rn tside stralia d U.K.	42.0	32.0	31.0	37.0	34.0	35.0	13.2	15.3	23.0	32.2	22.0	25.0
pulation	24,632	29,874	28,936	6,295	18,453	19,184	17,009	10,145	9,021	21,454	22,498	21,071

Source: 1976 Census data made available by the Australian Bureau of Statistics.

Note: Population decreases since 1971 were found in areas 1, 2, 4, 5, 6, 7, 8, 9, 10, 11 and 12. Population had increased slightly in that five-year period in Oakleigh.

used the Multilingual Project and volunteered to take part in this evaluation. The schools in these areas were non-state schools and therefore may have drawn their population from other areas of higher migrant density. Another explanation might be that as these were Catholic schools, they may have attracted Catholic students of migrant background.

The spread of areas in which the schools were located indicates the educational problems experienced by a sizeable part of the Melbourne Metropolitan area. It also indicates the diffusion of information and usage of a particular form of bilingual education, The Multilingual Project, designed for Australian conditions.

INSTRUMENTS AND THEIR USE

1. Pre- and Post-tests were developed based on individual units to assess the students' learning related to each unit. Students were divided into sub-groups on the basis of proficiency in English, first language, and sex. The sub-groups were compared with respect to gains demonstrated between the Pre- and Post-tests.

2. The characteristics of each sub-group were determined from Questionnaires and Interviews.

Pre- and Post-tests, Teachers' Questionnaire (TQ), Teachers' Interview Schedule (TI), Students' Questionnaire (SQ), and Students Interview (SI) and Parents' Questionnaire (PQ) are contained in Appendix 2.

3. Information was obtained from teachers on their subjective evaluation of units which were used with their classes. The instrument used for this purpose was the Unit Evaluation Questionnaire. The Unit

Evaluation Questionnaire (UEQ) can be found in Appendix 2.

The questionnaires and interview schedules (where applicable) collected background information on the teacher, student and parent samples. Secondly, they provided feedback on the perceptions these groups had of the Multilingual Project materials and their use.

The use of both questionnaires, interviews and informal observation was designed to further the purposes of illuminative evaluation by facilitating the response of those directly and indirectly involved in the Multilingual Project. The respondents directly involved with the Project were not limited to the rather impersonal mechanism of answering a questionnaire. Interviews were structured, but also included open-ended questions to encourage a full and frank response from those interviewed.

PROCEDURE

A sample of schools using the Multilingual Project was contacted to ascertain whether they were willing to take part in the evaluation study. From those contacted, fourteen schools were obtained.

The research assistant then visited the schools to determine which units of work were being used, to explain the evaluation instruments and how they were to be applied, and to establish a testing and interview schedule.

In the first phase, the unit Pre-Test was administered. Note that Pre-Test (P) and Post-Test (T) were equivalent instruments. Some students answered tests in the order (P) then (T), while others used the order (T) then (P). The order of administration of the two tests was randomly allocated to the children so that mean scores on pre- and post-tests may be compared without bias.

In the second phase, the research assistant visited schools for the purpose of delivering parent and teacher questionnaires. The schools cooperated in distributing and collecting the parent questionnaires on their return.

In the final phase, once the unit had been covered in the school, students answered the post-test and questionnaire. Students and teachers were interviewed. The teachers completed the unit evaluations. All of the data were collated by the research assistant.

Pre- and Post-Test and Questionnaire data were subjected to statistical analysis by means of the computer. Interview data were systematicall analyzed by one of the investigators to maintain consistency.

CHAPTER IV

RESULTS AND DISCUSSION: UNIT EVALUATION

The Project has educational aims which have practical and theoretical implications. The objectives of satisfying migrant children's psychological and social needs in terms of learning and adjustment to the school and home environment belongs to the former category, the research interest in bilingual learning processes can be classified under the latter. In order to investigate any of these aspects, as a first prerequisite, learning materials have to be provided. The quality and suitability of these materials undoubtedly play an important role in the actual learning situation and any outcomes. Consequently, we have probed teachers', students' and parents' reactions to the materials in a global way, in terms of acceptance and rejection, but also in some detail.

We considered the evaluation of the materials so significant that we asked the participating teachers to fill in a questionnaire solely devoted to this aspect of our research. Here was an added opportunity for teachers to air their views and comment freely. Apart from interest shown in topic choice teachers seemed to concentrate on this occasion on details of format and presentation together with some practical suggestions.

TEACHERS' OPINIONS ABOUT THE MATERIALS

All 22 teachers completed the questionnaire in which they were asked questions regarding their opinions about the materials that were used. Because they were volunatry participants in the scheme, it was not possible to arrange for them all to be working on the same unit. Most began with Animal Families, but then moved on to others. Consequently Animal Families was the unit which was most heavily represented in our sample, but another five units were also being used (see Table 4.1). Because the number of teachers using any one unit were relatively small, we have not attempted to break down the responses of the teachers according to which unit was in use at the time. Instead, we have combined responses across all units, and would prefer to regard them as responses to the curriculum materials in general.

TABLE 4.1

UNITS IN USE IN THE STUDY

Name of Unit	Number of Teachers
Animal Families	9
Communications	2
Aboriginal Myths	1
Libraries	2
Melbourne	6
Buying	1
Total	22

The teachers used the multilingual materials for a short time only per week. Fourteen out of the 22 estimated that they spent 2-3 hours per week on it, and none more than five. Some completed their unit in as little as two weeks, while others took as long as 12 (averaging 6½ weeks).

Pupils using the materials were in grades ranging from five to eleven, although most of the teachers clearly were using them with the grade levels for which they were designed - upper primary and junior secondary. The grade levels in which the materials were used are shown in Table 4.2.

TABLE 4.2

GRADE LEVELS IN WHICH MATERIALS WERE USED

Grade Level	Number of Teachers Using Materials
5	22
6	22
7	14
8	10
9	10
10	3
11	1
12	0

Teachers were asked to comment on various aspects of the materials - the content, language, clarity of instructions, use of questions and activities, foreign language translation, booklet format, illustrations, workbooks, resource kits. Ratings of "Very Satisfactory", "Satisfactory", and "Not Satisfactory" were given, and the results are summarized in Table 4.3

From Table 4.3, it seems clear that teachers were generally satisfied with all of these aspects of the materials, since the "Very Satisfactory" and "Satisfactory" responses outnumbered the "Not Satisfactory" responses by a ratio of which exceeded ten to one.

There were no aspects which brought significant indications of dissatisfaction, the largest number being 4 out of 22 who rated the language as unsatisfactory, while three gave an unsatisfactory rating on style of writing. It should be noted though that even in these two cases, the "Very Satisfactory" and "Satisfactory" responses outnumbered the "Not Satisfactory" responses by four to one and six to one respectively.

TABLE 4.3

TEACHER RESPONSES ON MATERIALS

Aspect	Very Satisfactory	Satisfactory	Not Satisfactory	N/A or N.R.
Contents	7	10	1	4
Language	7	9	4	2
Style of Writing	5	12	3	2
Clarity of Instructions	10	8	2	2
Questions and Activities	6	12	3	1
Foreign Language Translation	6	10	1	5
Booklet Format	7	11	2	2
Illustrations	6	14	0	2
Workbook	1	6	0	15
Resource Kit	6	8	3	5

The greatest frequency of positive responses were recorded for the unit content (17 our of 22), clarity of instructions, questions and activities, and booklet format (18 out of 22), and the illustrations (20 out of 22). The larger number of No Response occurred in relation to the foreign language translation (5), workbooks (15) and the resource kits (5), as not all teachers were using these. Those who were were overwhelmingly positive in their responses.

In an attempt to ascertain the reasons which lay behind the teacher's responses, we asked them to comment on the materials in such a way as to justify their previous responses. ("If you consider some aspects of the material to be unsatisfactory or exceptionally good, please give reasons here"). Sixteen teachers provided a total of 23 separate comments. These were somewhat difficult to categorize. Nine of them could best be described as "generally favourable", and four as "generally unfavourable". Four thought the language was too hard, and three described the activities as "babyish". The last two together probably reflect the difficulties which are inevitable when the same set of curriculum materials is used with children over a fairly wide range of ages. What may seem appropriate for the youngest children may well be a little babyish for the oldest, and, given the extremely varied language background of the children, perhaps it is inevitable that the language, however the units are written, will seem difficult to some. It is interesting to compare this with the comments made by the children themselves which are found in Chapter V.

The remaining two comments referred to the provision of answers to questions which were interspersed through the materials. One was in favour, one against.

The last question ("Would you use this unit again?") was intended to provide us with some overall indication of teachers' feelings about the materials if, regardless of their comments for and against different aspects of the materials, they would choose to use the unit again they must at least consider the unit superior to whatever other activities they could either purchase or devise. Of the 22, 16 responded that they would use the materials again, one would not, and two did not know. (There were three who failed to respond to the question, and this is probably due to the physical layout of the questionnaire - the item was unobtrusively placed at the bottom of the last page following the space provided for comments. A respondent who did not use the comment section could easily fail to notice the question, and this appears to have happened). It should be noted that their responses are consistent with the high rates of use and re-use that the materials have enjoyed over the years.

Generally, we interpret the teachers' responses as indicative of a favourable attitude to the materials. The overwhelmingly positive responses indicate that teachers do see the materials as fitting the needs of their pupils well.

TEACHER COMMENTS

Aside from their formal responses to the items, which we have described previously, many interesting and illuminating comments were made by the teachers, and these are now discussed under several headings:

1. Suitability of Topic.

> I consider the need for such units in Consumer Education to be particularly urgent. As this subject is very much of a topical and current "living" subject, of real practical application now, and in the immediate future for all students, it follows that students of a non-English speaking background, but living and working in our society would experience real difficulties in doing so and in turn would greatly benefit from this and similar units.

This comment includes some of the important considerations guiding the choice of unit topics. Our selection criteria include suitability of topic for _all_ students, current interest and social significance.

2. Format and Presentation.

> Content, exercises, activities, organization.
>
> In the Resource Kit, some things such as some puzzles and mazes and the Bear story were a little babyish for the older student I had; also, the English was usually too difficult to allow the students to work independently using the English version and the children I had were often eager to do their answers in English and not Arabic and at times copied meaningless slabs from the English page and then got frustrated when I suggested that for the moment answering in Arabic would be better as they could then write answers in their own words perhaps and more meaningfully. However, as I mentioned, unless a teacher aide who speaks Arabic is available, the problems I've mentioned seem unavoidable.

> Students seemed to be able to answer the multiple choice questions without fully understanding the text. I think they did this by picking cues from the questions and matching them with pieces of the text. It was difficult to adequately check this in English as their level of English at that stage was elementary.

These remarks highlight the difficulties created by the language barrier. Clearly, however, some teachers and students could bridge the language gap that separated them.

> I found the material very "readable" and it motivated the pupils to learn even more about the particular animal. They have also done further research on their own and they particularly enjoyed the slides. They also went on a day excursion to the zoo.

> Some of the activities were a little too simple for such students of advanced age (15 + 16). It was, however, a very satisfactory unit in Term 1 of relating and drawing on students' experience and redirecting such back to language skills. Students were very keen to become involved in this type of work inspite of the small amount of direction from the teacher.

The latter statement draws attention to the fact that the materials are sometimes used for age groups they were not originally designed for. The information sheets accompanying the units state that the booklets are suitable for the 10-14 year age group. Teachers have used the materials for younger and older students apparently aware of this and prepared to cope with the ensuing difficulties because there are no other bilingual materials for use in Australian secondary schools. With respect of activities and presentation, some comments flatly contradict each other.

> Format of workbooks was satisfactory, but didn't inspire much interest or excitement on the part of students. Perhaps a little dull in visual presentation. Also, students found them rather easy. Question and answer format a little boring.

> Variety of activities was good.

> Very good reproductions of original documents, photographs etc.

One of the teachers gives us the clue why we have such divergent opinions.

> Some areas needed further explanation - amount depending almost entirely on students', (a) reading/comprehension ability, (b) attitude, (c) previous learning of skills - for example, drawing map to railway station. Sequenced structure of contents excellent.

The student population participating in the Project is so divergent that in many instances a compromise has to be reached. The Project is financially limited and can only produce one set of materials for a limited age group. To satisfy the overall demand a greater range of topics and a variety of versions with respect to sophistication in language and concepts would be needed. Accordingly teacher suggestions are influenced by the learning skills and the learning potential of their students.

3. Teacher Advice.

> More activities needed to reinforce basic skills, e.g. putting letters and words in alphabetical order before we did the books.

Although the Project does pay attention to practising basic skills, the above suggestion cannot be followed up as alphabets are language specific and so cannot appear in the kind of parallel format we have adopted. This imposes other limitations, for example, rules out 'cloze' exercises. But this report documents the many advantages inherent in our bilingual approach, and should show that they far outweigh the limitations.

Finally, some teachers were prompted to refer us to complementary materials.

(a) Suggest separating the answers from the main booklet.

(b) Students required extra explanation of tasks on p. 23 and p. 27.

(c) "Australian Aboriginal Culture" - compiled by Australian National Commission for UNESCO is an informative and well illustrated booklet which could be readily used in conjunction with this unit.

This type of information is welcome because we can pass it on to other teachers in the Teachers' Notes accompanying each unit. Further, such advice shows a level of involvement by the teacher with respect to interest in teaching and the success of the Project.

SUMMARY.

The Unit Evaluation instrument was seen as an important component of the illuminative evaluation methodology. It enabled us to gather information from teachers relating to their actual experience with each particular unit they had undertaken with their classes. The ratings given by teachers to a whole range of aspects of the multilingual materials could then be set against significant features of the context in which they had been used, such as the point in the school year in which the unit was studied, the grades or forms of students and the duration of study. This type of information is required to enable modifications to be made to the Notes for Teachers which accompany the learning materials in the Multilingual Project.

Direct feedback on individual units was not confined to the specific questions asked. The provision of a Comments section enabled teachers to amplify their other responses on the Unit Evaluation instrument and to introduce fresh ideas based on their classroom practice. The comments ranged widely over opinions on suitability of topic, format and presentation of the units to suggestions for better use of the materials. If teachers are to become partners in research associated with curriculum development, opportunities must be built into research designs for teachers to contribute ideas generated by their practical involvement. In this way, the reflections teachers inevitably make on the learning processes occurring in their classrooms and which may lead to more successful outcomes can be channelled systematically to serve broader ends.

CHAPTER V

RESULTS AND DISCUSSION: QUESTIONNAIRES AND INTERVIEWS

One aspect of the illuminative approach adopted for evaluating success in bilingual education (see Chapter III) is the emphasis placed on self-reported participant perceptions. It is our conviction that subjective reactions are undervalued in this type of evaluation. We agree with Lewis (1975) that there is an urgent need to develop an evaluation paradigm particularly suited to bilingual education where personal attitudes play an ever greater role than is the case in monolingual schooling based on well established tradition. Lack of experience with bilingual education, the widespread misunderstanding of the relationship between a bilingual's languages and the connection between the internal cognitive or semantic code (Foss and Hakes 1978) and language, particularly during the period of language development, have resulted in widespread fear and suspicion of this type of education. There is some research evidence (Rado and Lewis 1979; Lewis and Rado 1980; Rado and Lewis forthcoming 1980) that a negative attitude towards L1 maintenance is prevalent in the Australian school community. This is manifest in attitudes towards L1 teaching during conventional school hours and even more so towards bilingual instruction in some school subjects.

In contrast to attitudes of those inexperienced in bilingual education, we had the opportunity to probe the perceptions of participants in bilingual education, namely the opinion of 'experienced' individuals. It was felt that acceptance and satisfaction of a bilingual programme were significant indicators of its value. This should be included whenever bilingual education is evaluated which does not seem to be the case at present (see La Fontaine et al. 1978). Clearly, Lewis' call for a new paradigm has not been taken up. In Australia with such weak support for bilingual education, the subjective positive factors in evaluation have, we believe, an even greater and significant role.

Informed of this attitude to evaluation, we have made a detailed analysis of the elaborated responses of teachers, students and parents included in the questionnaire and interview schedule.

We were particularly interested in the following general considerations as significant indicators of success in bilingual education.

1. Attitude to L1 maintenance including practical considerations and cultural ties.
2. The social aspect of bilingual education.
3. School achievement and bilingual education.
4. Bilingual education and learning English.

The nature of the responses demanded a different sub-categorization of the general areas of each group.

HOW WERE THE MATERIALS USED?: STUDENT QUESTIONNAIRE

Nearly all students involved in the study were using their first Multilingual Unit, the only exceptions in the 281 being 36 working on their second unit and one on her third. Contrary to expectations, a fair proportion of the students appear not to have used the materials in a truly bilingual manner. When asked "Did you work in both languages when you were using the study units?", the responses were as shown in Table 5.1.

When asked why, the responses generally indicated that the students felt compelled to use the materials in the way they did. The major categories of response were summarized as follows:

TABLE 5.1

LANGUAGES USED WITH STUDY UNIT

Language	Number	Percent
English only	215	76.5
Other language only	13	4.6
Always used both	30	10.7
Usually one, occasionally the other	17	6.0
No response	6	2.1
	281	100

For using the materials monolingually:

I only read English (58)

English is easier for me (43)

I have insufficient English (9)

My other language is easier for me (5)

I was given no choice (7)

For using the materials bilingually:

To learn English (6)

To help with my English (17)

To help retain my other language (1)

Many gave a mixture of the above reasons, and many of course gave no reasons at all. Our sample had much greater English competence than we had expected, and many of them may not have seen the bilingual use of the materials as important or necessary.

Students do appear to share some of the values held by the developers of the project. Asked which they thought was more important, learning in two languages, or learning in English only, 154 favoured two languages, while only 68 favoured English only. The same number, 154 (although not the same students), said they would prefer to learn in two languages, so it is puzzling that more did not choose to use the materials in that way.

Generally, the units were well received by pupils. They enjoyed using them, they felt that they learned from the experience, and that the difficulty was appropriate. See Table 5.2 for further details.

TABLE 5.2

STUDENT'S REACTIONS TO MULTILINGUAL UNITS

Question	Response		
	Yes	No	Don't know/did not respond
Did you enjoy working with the units?	214	19	47
Is it difficult to learn from booklets (or tapes) like these?	29	216	36
Did you learn many new things from these units?	237	15	29
Did working with them help you to take part in lessons?	148	50	83
Has anybody at home seen these units?	91	165	25
Did other members of the family help you with them?	27	237	17

The units may have had some impact at home, given that they were seen by others in around one-third of the homes. Very few said that their families actually helped them with the work, but this could perhaps be an underestimate, resulting from a feeling that to seek help at home is a sign of weakness, or inappropriate in other ways.

Although the units were not devised as language units, many students felt that working with the units had improved their language skills — with English (123), with their other languages (16), and with both languages (33). A significant minority (54, or almost 20 percent) said that their native language was more important to them since using the multilingual units.

Many useful evaluative comments were made concerning the units. Asked whether they liked the last unit they had studied, 80 percent replied "yes", and only 9 percent "no". Unsolicited comments written on the questionnaires were overwhelmingly positive, and included

"I like it" (23 children)
"Thanks" (2 children)
"I learned from it" (14 children)
"It was interesting" (12 children)
"I would like to do more" (13 children).

More detailed comments were obtained in the student interviews, and will be discussed subsequently.

HOW WERE THE MATERIALS USED?: TEACHER QUESTIONNAIRE

From the Teacher's Questionnaire, a great deal of information was obtained concerning the way in which the teachers used the materials and their views about their purposes and effectiveness. This information is summarized below.

The materials are designed so that they can be used by students working individually or in groups. Asked how they used the materials with their classes, teachers responded as shown in Table 5.3. The 22 teachers clearly found a variety of ways of using the materials. This is also indicated by their answers to the question concerning organization within class, as shown in Table 5.4. Most commonly, students worked individually at their own pace, or partly individually and partly in groups.

TABLE 5.3

HOW WERE THE MATERIALS USED?

Use	No. of teachers
By migrants for independent study in a classroom where other Australian students are working on something different.	7
By migrants alongside other Australian students who are using the same materials in English.	4
In withdrawal classes (all ethnic groups together)	6
Other (usually mixture of the above).	4

TABLE 5.4

WITHIN CLASS ORGANIZATION

Students in a class generally work:	No. of teachers
At the same pace	1
At individual rates	12
In small groups	0
A combination of these	8

Although tapes were available to supplement the booklets, these were not commonly used, an understandable decision given the English language skills possessed by most of the students.

There were three ways in which a student could use the text booklets. One is to use the English-language text only, the second is to use the other-language text only, and the third is to use the two texts together, so as to make full use of the students' total range of language skills. An encouraging number of teachers reported that at least some of their students used the texts in this way (see Table 5.5).

TABLE 5.5

HOW ARE THE DIFFERENT TEXTS USED?

Students' use:	Teachers' response	
	All students	Some students
English text only	2	10
Other text only	1	7
Both texts	5	13

There is some contrast between the teachers' perceptions of how the students used the books, and those of the students, who were much more inclined to respond that they used only one language (usually English). The teachers of course were much more aware of the thinking behind the development of the units, and may have had a tendency to respond in line with what they thought was expected of them. On the other hand it is possible that the teachers gave both materials to the students, who accepted both, but used only one. Conversely the students may have consciously or unconsciously presented themselves in a way which made them appear more "English-speaking" than they really are.

One feature of the materials is that they enable teachers to cope with students working in their own language, even though the teacher may not know the language. There is a variety of ways of coping with the situation, most of which the teachers endorsed. When asked "If your students work in their native language(s), how do you handle the situation?" their responses were as shown in Table 5.6.

TABLE 5.6

HOW TEACHERS COPE WITH STUDENTS WORKING IN THEIR NATIVE LANGUAGES

Way	No. of teachers
Students who speak the same language work together and help each other.	16
Colleagues or interpreters help.	7
Students are helped by parents at home.	4
Teacher follows students' progress by using parallel texts.	13
Teacher allows the students to work independently.	10
Teacher communicates with students in their native language.	3
No satisfactory way of handling this situation.	4
Not applicable, since all students work in English.	2

Of course many of the teachers used more than one way of handling the situation, but it is worth noting that the most common ones involved no specialist help, and no specialist language skills on the part of the teacher -- an explicit aim of the multilingual materials.

There were a number of questions which specifically asked teachers to evaluate aspects of the project materials. First, they were asked how much the project materials had helped the students with their English, with their other languages, with their learning of factual material, and with taking part in lessons. Responses were as shown in Table 5.7.

TABLE 5.7

HOW MUCH HAVE PROJECT MATERIALS HELPED THE STUDENTS?

Helped students:	A great deal	A little	Not at all	Don't know	Not Applicable
With their English	5	11	2	3	1
With their other language	1	6	1	11	3
With learning factual material	10	11	0	1	0
With taking part in lessons	7	8	4	2	1

The benefits the teachers saw related most to the pupils' learning of factual materials, and to a lesser extent with taking part in lessons, and with their English. Most simply did not know whether students had been helped in the development of their native language skills -- understandably since without a knowledge of that language, teachers would be unable to observe any improvement.

There were several questions which explored the teachers' attitudes to bilingualism and the bilingual materials, and in each case the attitudes expressed were overwhelmingly positive (see Table 5.8). Of course it is impossible to estimate in a situation like this how much the teachers' attitudes were shaped by their experiences in using the materials. It is possible, and even likely, that the materials are particularly attractive to teachers who already hold favourable attitudes to biligualism and bilingual education.

TABLE 5.8

TEACHERS' ATTITUDES TO BILINGUALISM AND BILINGUAL EDUCATION

Question	Yes	No	Don't know
Do you think migrant students should be encouraged to use their native language when they are at school?	20	1	1
Would you like to see bilingual education extended in your school?	19	2	1
Do students enjoy working with the bilingual materials?	15	3	4

The positive tone of these responses, and of the comments accompanying them, indicate that the teachers involved in the study have found their experience with the project materials useful and worthwhile, and one which should be extended to other teachers and other students.

TEACHERS' INTERVIEWS

In addition to the quantified teacher questionnaire data we also have the transcripts of the structured interviews with 16 teachers. The analysis of these protocols yielded some useful information. The remarks could be easily grouped under the following headings: (1) motivation and expectations; (2) outcomes; (3) future plans and advice.

1. MOTIVATION AND EXPECTATIONS

Question 21. Why did you take part?

Question 27 (a). At the outset, what did you expect from the Project? Responses could be grouped according to themes.

The number of remarks listed under this and subsequent categories does not correspond to the actual number of remarks made because on several occasions teachers used exactly the same wording, e.g. 'To teach English''.

A. Developing English language skills

- Teach them a little English.
- Something to practise their English on.
- Something to talk about in English.
- English vocabulary would expand.
- Useful for English teaching because designed for migrant students.
- Bilingual education is a useful transition to learning English.
- Improve migrant students' English so that they can do what everyone else does.
- Extend students' knowledge of English.
- To teach English.
- To teach English through a particular subject.
- To expand students' vocabulary in English.
- For developing English through bilingual education. Convinced it does not retard intellectual development.
- As a transitional phase to instruction in English.
- Improve migrant students' English so they can do what everyone else does.
- To use in T.E.S.L. for learning English.

These remarks show that there is a strong tendency among teachers to see the materials as a means for easier and more efficient transition to English. This is not surprising as half of the participating teachers were involved partially or totally in teaching English as a second language. We are aware that the materials can be used in this way, although they were not designed simply as a stepping stone to English mastery to be discarded as soon as initial difficulties in English have been overcome. We have no jurisdiction over the use of the materials once teachers have adopted them. What we endeavour to do is to interview teachers before participating in the Project. We also try to reach them through lectures, seminars and publications which discuss the Project so that its multiple aims become apparent. We also expect that in the course of using the materials the possibility of attaining other objectives, e.g. subject matter learning, ethnic language maintenance, will become apparent to the teachers exclusively oriented towards English language learning. Once this potential is recognised by teachers in the classroom context, it may well be that they decide to give it some attention.

B. Maintaining/developing/exploiting students' L1

- Continue learning L1.
- Extend knowledge in own language.
- Practise their own language.
- Not interested in developing L1.
- To use their own language which is socially desirable.

List B is the only instance where the number of remarks corresponds to the number of times they were made. It appears that these teachers were not particularly concerned with bilingualism *per se* or they would have paid more attention to this aspect of the Project. Preoccupation with teaching English and lack of language skills in the students' own language may account for this. The lack of attention paid to the minority language skills is in contrast with current thinking in multicultural education. Although there is no clear consensus of opinion, most writers and researchers support L1 teaching in theory and practice. Other members of the teaching profession, e.g. administrators and teachers (with the exception of language teachers) in many instances seem less convinced of the importance of L1 learning. In particular, they don't see the teaching of languages other than English as part of the core curriculum (Skilbeck, personal communication, 1979). As decisions about the core curriculum have all-embracing consequences, the attitude of educationalists toward ethnic languages deserves urgent attention so that the social, affective and intellectual implications of ethnic language maintenance and development are fully understood. The Schools Commission discussion paper on multicultural education (1979) can play an important role here.

C. Subject matter learning/concept development/intellectual level

- To keep them learning.
- To give recent arrivals work at their own level.
- Recent arrivals would learn new concepts, encounter new information.
- To give new arrivals work.
- To build concepts in two languages.
- To widen students' interest.
- To give students work they can cope with.
- Students will learn about Australia.
- To stimulate subject matter learning.
- Avoiding frustration by learning not just drawing pictures.
- To do work at the same level as the other kids.
- Something constructive to do at their own intellectual level.
- Introduce Australia to new arrivals.
- To gain some knowledge about Australia.
- To make students realize they already know things, did not start from scratch.
- Content of materials would fit in well with general syllabus.
- The materials would lead to discussion.
- The materials would broaden students' knowledge of History, Australian culture.
- Introduce new arrivals to Australian socio-economic conditions.

- To give work at students' own intellectual level, work they can cope with.
- Basically to obtain English teaching materials - these materials are more concerned with concepts.
- To learn about Australia.
- To learn subject matter.
- To give kids interest in library learning.
- Content of materials fitted in with general syllabus.
- Good material will lead to discussion.

Since the Project is subject-matter oriented and strongly emphasises the conceptual development of students, it is not surprising that there was such a rich response by teachers to this aspect of the materials.

It is cheering to note that besides the strong desire to further students' intellectual development, broaden their experiences, including their knowledge of Australia, there is also concern for quality education.

D. Classroom management and attitude of students.

- Australian born would respond positively to interest shown in ethnic languages.
- To allow everyone to work on the same thing even though some would do so in their own language.
- To have whole class involvement.
- Integrate new arrivals into the class.
- To get newcomers to fit in with others.
- They could be seen working like the others.
- To serve as a stopgap and enable students to work on their own in the larger classroom situation.

- Students would work on their own and bring folders for checking.
- Kids couldn't speak English. There were no materials, no teachers who knew the kids' language.
- To help kids not catered for otherwise.
- Would encourage independent work. Because of range of ability, students needed to work at different levels.
- To keep non-English speakers quiet. Once they knew enough English the materials were not used.
- To occupy migrant kids.
- To incorporate new students into class.
- Suitable for independent study.
- Would satisfy new comers and extend other kids.
- Something to work on.
- To give new arrivals work.
- Project materials will help to widen students' interests.
- Would be suitable as the materials were designated for migrant students.
- Improve attitude to learning.
- Motivate students.

These remarks on classroom mangement and attitude of students reveal much about teaching conditions. The ability and language range in many classrooms force teachers to look to individualized instruction. The Project offers such a solution, at the same time it helps students to accept each other and display their individual skills without having to compete for attention. Further, conscientious, caring teachers are worried about the way the language barrier isolates students from their peers and excludes students from learning which in turn leads to a lack of motivation. They want to counteract this. They object to situations where students have nothing to do. As the following remarks show, this leads to criticism of colleagues.

E. Attitude of teacher colleagues and resources in the school

- Outside English classes they were not learning anything.
- Add to teaching resources.
- Project would stimulate interest of subject teachers.
- Bilingualism is lost in secondary school because of authoritarian teachers. The Project would counteract this.
- Other teachers apart from M.E. teachers would be more involved with migrant students.
- To counteract the fact that classroom teachers made no provision for migrants.

The concern for students' general schooling and the wish to make colleagues more responsive to the needs of linguistic minority students is an interesting aspect of the approach of these teachers to their task since secondary school teachers tend to be subject teaching oriented to the exclusion of other considerations. It is hoped that the growing interest in multicultural education and the core curriculum will broaden the perspective of all teachers so that they will feel more responsible towards migrant students and more prepared to share in their schooling despite the additional work this entails in and out of the classroom.

Other aspects of bilingual education are almost totally ignored with the exception of students' self-concept, multicultural education, and parental attitudes. The latter get scant attention.

F. Students' self-concept/identity/well-being.

- To build up the ego of new arrivals. When they go into the big school they don't lose their pride.
- The materials would give a sense of security through achievement.
- Avoiding frustration by learning not just drawing pictures.

- Give migrant students pride, confidence and provide them with a challenge.

G. Multicultural/bilingual education

- Bilingual education should be part of multicultural education.
- Materials aim at developing both languages, but my aim is to teach English.
- Does not work well bilingually.
- Those who can cope with English don't need it.

H. Consideration for parents

- To please parents.
- Parents will jump at it.

Generally, teachers' responses in this section reveal that they have a predominantly practical orientation to their task. Teachers do not mention all the issues discussed in the multicultural/bilingual education literature. Where common themes can be detected they receive differently evaluated or weighted attention. The literature in Australia which, in this instance, reflects educational thought in the US and Canada gives priority to the learning of English, but it also strongly emphasizes minority student needs in terms of their identity, cultural heritage and relationship with their own ethnic group, the maintenance and development of their ethnic language, the obligation to provide them with equal educational opportunities, and parent school relationships.

Except for students' self-concept, none of the above seems to have noticeable teacher support, although one teacher did see bilingual education as an element in multicultural education. In the literature on multicultural education the needs of majority children are also discussed with a view to broadening their cultural and language experiences. In particular, community language learning is advocated for all.

Our sample was not concerned with the majority child and seemed hardly aware of the intellectual advantage of knowing more than one language.

2. OUTCOMES

Question 27 (a) At the outset, what did you expect from the Project,

(b) Did these things come about?

A. Results expected

- Attitude of Australian born to ethnic languages improved.
- The Project provided whole class involvement for literate students.
- Students were no longer frustrated because they were learning not just drawing pictures (with the exception of one Arabic child).
- To give kids interest in library learning which was fulfilled.
- Migrant students could do what everyone else did in one group, but not in the other.
- Content of materials would and did fit in well with general syllabus.
- Students talked more in English.
- Raised the status of migrant students because they knew a "difficult" language (i.e. the ethnic language)
- English improved (dramatically in some instances)
- Students did get work done.
- It was possible to differentiate ability levels.
- Helped the motivated intelligent student.
- Newcomers can work independently.
- English version teaches English.
- Helped with Spanish.
- The materials reinforce the notion how important it is to have bilingual learning situations.

- Helps to gain some knowledge about Australia.
- Worked well with those who knew little English.
- Stimulated student interest in library learning.
- With the help of the tapes, illiterate students can learn about their own culture and Australia.
- New boy has come up in class estimation, is no longer silly, does not have to compete.
- Students had something to do for the rest of the year.
- The work done in English was worthwhile.
- Students' vocabulary expanded in English but not quite as much as expected.

If we analyse the remarks made concerning the fulfilment of teacher expectations we find similar themes emerging to those discussed already. Teachers found that the materials helped language development, subject matter learning, stimulated students to work, improved personal relationships among students, catered for individual student needs, enabled students to work independently and fitted in well with the general syllabus.

B. Results unexpected

- It was difficult to explain the concepts in simple enough English.
- Parents did not seem interested, perhaps the language of the materials was too sophisticated for them.
- Did not help the reluctant learner.
- Suitable for group work only if student is motivated.
- Difficult to check in Spanish.
- Does not work well bilingually.
- Some students who can't cope in English, can't cope in own language either.
- Some students know little about Australian way of life.

- Those who can't cope with English can read texts in own language, then discuss it in English.
- Some of the English vocabulary is too difficult.
- Some students could not understand their own written language.
- Some students wanted to get away from the materials to participate in class.
- Students' English not good enough to understand the English versions.
- The girls were enthusiastic and got on well, but the boys were not very interested.
- Learned about students' experiences in their own country.
- Gained insight into how competent the kids are.
- Found out who among the students are the better educated ones.
- Could differentiate about their academic ability.
- Migrant students are more mature and better motivated than Australian students.
- Learned about students' family backgrounds. Students talked a lot more about home which they tend not to mention otherwise.
- Migrant kids sometimes have difficulty with their own language.
- Some students had trouble in reading and writing Arabic. Thought Arabic would be easier
- Contrary to expectations, other teachers apart from M.E. teachers did not concern themselves with the bilingual materials.
- One boy on own initiative made a dictionary.
- One boy wanted more stories.
- Helped social interaction in case of a turbulent boy who was an outcast
- How interested parents were with little encouragement in a school with little parent-teacher contact.
- Students got excited about comparing vocabulary.
- Students learned about Australia.
- Learned words they use in their own language. Came closer to under-

standing their native language. Could show interest in students' language. This may make a difference to students.

- One girl took the unit 'Melbourne' home to read.
- Realized limitations in students' own language particularly if dialect.
- Materials had a general use with English speaking kids.
- Migrant students although literate showed an inability to make decisions, follow written suggestions.
- Some students refused to look at the English version.

The unexpected results reported by teachers yielded some interesting information. On the negative side, teachers had difficulties with the non-English language versions. Students sometimes had difficulties with both language versions. What teachers discovered was that some students were not sufficiently competent in either language. This did not surprise us as our familiarity with the classroom situation and the professional literature (Tokoumaa 1976, Cummins 1978 etc.) have made us aware of the difficulties bilinguals encounter in using their languages for school learning. In this discussion we have deliberately avoided the term semi-lingualism sometimes used to describe the bilingual's lack of language mastery because of the controversial nature of this concept. Where difficulties in language development do exist, we believe that early and continued bilingual education would substantially reduce them.

On the positive side we can rejoice in the fact that teachers discovered how able some students are, could ascertain their academic ability better, became interested in the students' language, were impressed with parental interest, learnt about students' backgrounds. In sum, it can be said that the Project was instrumental to greater student-teacher understanding.

3. FUTURE PLANS AND ADVICE

Question 40. Would you use it again?

Question 47 (a) Would you recommend the Project to others? To whom?

(b) For whom do you think it is the most valuable?

Question 51. If your pupils work in a language you don't understand, which way of handling the situation have you found most effective?

Question 52 (a) Could you specify the skills needed most by teachers using the Multilingual Project materials?

Question 52 (b) In your opinion which skill is most effective?

As the above shows we had a multiplicity of questions designed to tap teacher experience with bilingual learning material. To the discussion of responses to these questions in the section reporting on quantified data, there is little to add as teachers did not give elaborate responses. This is disappointing because we hoped that they would offer us additional information and advice.

(a)
- Materials must be treated conscientiously.
- Can't just put materials in front of students. The work must be organized and one must keep track of each student.
- Teachers need to pay attention to introducing the materials must organize group work and stimulate discussion. Must provide supplementary material.
- Project must not be used as a stop gap.
- Project use needs planning and enrichment.
- The Project needs to be introduced enthusiastically.

(b)
- Would use it with students weak in English.
- Project can serve as a general resource for English and the ethnic language.

- Bilingual teachers are important for the efficient use of the Project.
- Would use it if we had more staff.

A perusal of remarks grouped under (a) reveals that they are not particular to the classroom use of bilingual teaching materials. They generally apply to the learning/teaching situation. It can be said that all teachers need to be enthusiastic and conscientious, they must pay attention to planning and enrichment under any circumstances. Remarks grouped under (b) are more specific to the use of the Project texts. Firstly they show that the texts are easy to read in English. This has implications for slow readers whether of bilingual or monolingual background. In fact some schools have used the materials for this specific purpose in the English version only (e.g. St. Monica's, Epping; Swinburne Technical School). Secondly, they recognize the dual (English and ethnic) language teaching potential of the materials. Thirdly, they point to the need for more generous staffing, in particular the important contribution bilingual teachers can make.

STUDENTS' INTERVIEWS

The analysis of students' interview protocols yielded remarks that were grouped under the following broad headings: (1) attitude to bilingualism; (2) language dominance; (3) attitude to bilingual learning; (4) perceived learning outcomes; (5) manner of use; (6) evaluating bilingual learning; (7) attachment to Australia and country of origin; (8) spontaneous remarks.

Attitude to Bilingualism.

Question 13: How do you feel about speaking more than one language?

Question 14: Why? What are the advantages of speaking other languages?

The response to Question 13 was overwhelmingly positive and generally took the form of: (it's) good, (it's) useful, (it's) better, (it's) alright. Forty-two students responded to question 14 by elaborating on their reasons for favouring bilingualism. These reasons were, in the majority of cases, oriented towards other people. Here we have further support of the need affiliation of bilinguals (see Rado 1976). It appears that bilinguals have a tendency to linguistically accommodate their interlocutors. The desire to accommodate may be due to a feeling of insecurity. There is a strong indication that fitting in with other people, understanding and helping them, matters to our sample of bilingual students irrespective of their L1. This may well be a fairly general characteristic of bilinguals (Kelman 1972).

A. Interpersonal communication:

Spanish girl: You can talk to some kids. If they talk Spanish, you can talk Spanish. If they talk English, you can talk English.

Greek boy: Because you can communicate with both people, Greek and English, for understanding.

Turkish boy: It's good to speak Turkish and English. If you go to Turkey, you can speak Turkish, if you come here you can speak English

Spanish boy: Pretty good. When you grow up, someone doesn't know how to explain something, you can explain for him. You can in anoth country and work and if an Australian comes and he doesn't know nothing you can talk to him.

Italian boy: Feels good to communicate with others who talk another langua, like friends of ours.

Arabic girl: I like it, to speak to my friends.

Arabic boy: Useful for understanding others.

These views are congruent with the views of monolingual English speakers who would like to speak another language.

English boy: Would like to have more than one language to speak to some people who are new to the country.

English boy: Would like to speak another language to talk to people who come from other countries.

English boy: Good to have more than one language. If someone came into a shop and didn't talk Australian, you could talk to them and tell them something.

As the Spanish speaking boy's explanation shows, bilinguals are aware of the world outside Australia. This lends a cosmopolitan flavour to many of their remarks. As their answer to Question 46 shows (to be discussed later), they expect to travel, i.e. many plan to visit their country of origin. One gains the impression that they are basing their remarks on personal experiences. Similarly those who see practical advantages in bilingualism often refer to specific situations in which they may have in fact participated.

B. The cosmopolitan aspect of bilingualism:

Turkish boy: So when you go to other countries it will be easier for me to tell them what I want, understand what they say.

Spanish girl: Because if you are somewhere you can speak to people. If you only know your own language, and you get out of the country, you can't communicate.

Greek boy: Helps you if you go to another country.

C. Bilingualism as a practical asset:

(a) In public places:

Greek boy: Good thing to know both because if you go to banks people from other countries come in and they want to know how to proceed to get money out of the bank or put it in or get a new book and you just explain to them.

Greek boy: I think if you speak more languages is the best thing, because come in Australia and I know English I can go into Greek shops and buy anything. I go to the English shops I know what I have to do.

(b) In employment:

Greek boy: Good thing. You can get easy jobs. The more languages you know, the better it is.

Spanish boy: Alright. It could be and because when I grow up I could be an interpreter. I can talk to different people. Helping other people who can't talk very good English.

Spanish girl: Useful - yes - to study at university, for some work.

Greek girl: Help me to find a job.

Finally, there are a number of students who attach a general value to bilingualism. For them, learning and knowing another language is intrinsically good and interesting. As a matter of fact they often stress that the more languages you know the better.

D. The intrinsic value of bilingualism:

Italian boy: Feels good to communicate with others who talk another language, like friends of ours.

Macedonian girl: It's better if you know 2 languages of 3. It's better for you to understand what other people say.

Arabic boy: I like to speak a lot of languages.

Spanish girl: We need another language in future. I think it is better for me. I think Spanish is an advantage in Australia.

Turkish boy: Good to learn 2 languages when you speak one all the time, I reckon. It is interesting to learn another language than the one you speak.

In summary, the following aspects of language learning and bilingual education could be used as starting points in the preparation of programmes and in the teaching situation: (1) interpersonal communication; (2) the cosmopolitan aspect of bilingualism; (3) bilingualism as a practical aspect; (4) the intrinsic value of bilingualism. Once these considerations have been taken into account, the attention of students could be drawn to other valuable aspects of bilingualism. This could help to reinforce their positive perceptions and also broaden their understanding of the concept.

Language Dominance.

Question 22: Which language do you find easier to speak, English or X?

Question 23: Which language do you find easier to read and write English or X?

Question 24: Why?

These three questions were asked to obtain information on students' perceptions of their bilingualism, in particular the relationship between their languages and the ability to reflect on their language skills. Forty-eight students were able to do the latter by giving an explanation. The students who saw themselves as competent bilinguals, i.e. found both languages equally easy, made diverse remarks reflecting their particular experiences which they possibly share with others. The three examples below illustrate how bilingualism can come about and some of the temporary problems it may create.

Spanish boy: Both the same, because I learnt a lot of English. (From Chile, here 2½ years)

Italian boy: When a little kid talked Italian at home, when I went to school started to learn English. At home still talked Italian.

Greek boy: Sometimes I get muddled up with words, same in Greek. English and Greek get muddled up together to that I can't say.

Those who reported that they were strongly English dominant, had little to say. As one boy put it succinctly: I forgot Turkish. Neither he or the others had much to add.

However, those who found L1 easier, were ready to comment. Their judgements fit into three distinct categories: (1) chauvinistic, (2) linguistic and (3) common sense.

1. Chauvinistic: reasons were typically expressed by:

   Greek boy: Greek, it's my country. (2½ years here)

   Turkish boy: Because it is my language. (1 year here)

It's easier because it's my (native/own) language. (15 times)

** Spanish boy: (Spanish easier). Because I come from Chile.

** Turkish girl: It is the language of my native land.

Greek girl: Because I am Greek.

2. Linguistic:

Turkish boy: Turkish is easier than English to read and write. In Turkey to read and write is same, in Australia different. You say something you can put it straight down, (demonstrated on blackboard).

Turkish boy: Turkish - the alphabet, you know, what you say you write it just the same.

Spanish boy: Spanish is easier to read and spell.

** Spanish girl: Spanish is easier to read and write. Because it is my native language. (This was said repeatedly)

** Spanish boy: Spanish easier. You pronounce it and read it as it is writte

Spanish girl: English you pronounce one way and write the other way. English is difficult for my parents. It is easy for me.

Spanish girl: The writing - speaking the same. (Italian dominant)

Greek boy: English easier to read and write because in Greek where comes the loudest part you must put dots on top.

Greek boy: Reading and writing English easier. In Greek you have to do the dots and things.

3. Common sense:

Spanish boy: Spanish is easier because I hear it first.

Greek boy: Greek because in Cyprus I was 12 years, in Australia only 2 years.

Turkish boy: Because I haven't been here too long, I haven't knew too much.

Yugoslav/ Spanish boy: Spanish easier because have been here only 1 year.

Macedonian girl: If I learn here it will be the same. Some people work in English and forget their own language.

** Interviewed in L1.

Italian boy:	It is easier because I have been in Italy most of the time. Maybe it will be easier. Because I learn English now it will be the same.
Greek boy:	Because I know the language from when I was little.

The chauvinistic reasons deserve attention. They reflect students' or rather their families' immigration background. As Kunz (1973) has pointed out, the various immigrant groups have different characteristics depending on the circumstances of their immigration. So there is no homogeneity among groups or within groups. Immigrants may reach Australia from the same country of origin about the same time, yet their reasons for coming may be different. Loyalty to their country and ethnic language may be equally strong, but differently motivated. Kelman (1972) calls such loyalty sentimental attachment. As the responses to Question 47 show, immigrants can see practical advantages in their adopted country. Kelman calls this instrumental attachment. He further argues that instrumental attachment is sufficient to ensure positive attitudes towards the host country. If we accept Kelman's theory, we should support language maintenance through ethnic language teaching and bilingual education because many bilinguals have an affective and cultural need for it. But this is not the only reason. Students who know another language well, should be allowed to strengthen and use their knowledge, rather than waste it. This is not only important in the initial stages, but throughout the period of their language development, i.e. throughout their schooling from K1-12.

Student remarks show an awareness of this as long as they have competence in L1. Once this is lost, interest in the ethnic language disappears together with interest in language per se. One could argue that keeping the language issue alive in actual or potential bilinguals is educative. Although thought and language are not identical, broadening an individual's linguistic horizons with respect of skills and awareness has intellectual advantages. This is documented in the literature on bilingualism (e.g. Ben-Zeev 1977).

Attitude to Bilingual Learning.

Questions 26, 27.	Did you use the kit in English, in X or in both languages? Why?
Questions 28, 29.	How do you feel about learning both in X and in English? Why?

These 4 questions are discussed together because they deal with the manner in which the texts were used. What is notable about them is the rich response they provoked and the fact that they endorsed the purposes of the optional bilingual approach to learning the Project has adopted.

According to their responses students can be divided into the following groups:

1. Users of the L1 version only.
2. Users of the L2 version only.
3. Users of both versions by
    - reading the L1 text first,
    - reading the L2 text first,
    - reading the L1 text but occasionally referring to the L2 text,
    - reading the L2 text but occasionally referring to L1,
    - referring to both texts throughout.

Group 1. Users of L1 version only.

Typical reason given for using L1 only were -

Spanish girl: (Did it in Spanish) I didn't understand English.

Greek boy: Used just the Greek. English too hard.

Spanish girl: (Did it in Spanish) (after 1 year from Uruguay) Its easier.

Spanish boy: (Did it in Spanish) (after 1 year from Chile) Don't speak English well.

Spanish boy: Did it in Spanish. They gave me a choice and I couldn't understand English.

Spanish boy: (Used Spanish) I didn't know much English (1 year from Chile, learnt a little English there)

Spanish boy: It's the only one I understand (used Spanish)

Spanish girl: (Used Spanish) That's how I could do it.

Spanish girl: (Used Spanish) Because I could understand (4 months from Uruguay).

Spanish girl: (Used Spanish) It was easier to understand.

Spanish girl: I didn't understand the English.

Spanish boy: I don't speak English well.

The responses of this group show that some students need to use their L1 for learning. They have not mastered L2 sufficiently for school work. The language and learning needs of this group is self-evident.

Group 2. Users of L2 version only.

Students in group 2 have to be sub-categorized into those who 2a were English dominant; 2b preferred learning in English; 2c wanted to learn English; 2d were told by the teacher to use the English version.

2a Turkish boy: Read a little Turkish, can't write. Mum and Dad taught me and I knew a little bit in Turkey. I know a lot of English but have forgotten most of the Turkish, so it is easier now. I looked through the Turkish and gave it back. Used English only.

2b Used English because I don't like Spanish much.

2c In English, to learn English better.

2d (after 3 years from Uruguay) (Used English only) The teacher told me.

The skills and attitudes of students in groups 1 and 2a, 2b, 2c, highlight the importance of making bilingual education optional and individualized. These are means which help to cater for varied and unpredictable demands.

Group 3. Users of both versions.

In view of the debate surrounding bilingual education and the theoretical foundations of the Project the remarks of this group are the most interestin and illuminating. What emerges clearly is that students perceived the purpose or usefulness of the bilingual texts according to the prior notions they brought to the learning task. They used both versions of the text to (a) make learning/understanding per se easier, (b) to learn L1 and/or L2 better. In other words, some students were oriented towards subject matter learning, or learning in general, others towards English language learning. The responses to questions 26, 27, 28 and 29 also revealed a degree of linguistic awareness among students, (3d) positive feelings towards bilingual study and (3c) feelings of language loyalty.

3a. Focus on understanding

Greek boy: One helped with the other. Read the Greek ones and then ran over the English to understand it a little bit more better.

Greek boy: First I used them in Greek. Some questions I couldn't understand in Greek so I used them in English.

Greek boy: I was using the English mostly but also Greek. Some of the English words were a little bit hard to understand, then I looked at the Greek. Generally English is easier to understand.

Spanish boy: Did it in English and Spanish because when I didn't understan English word I looked at in Spanish and when I didn't understand a Spanish word I looked in the English.

Turkish girl: It is easier to use both of them.

Spanish girl: (Did it in both) To make sure that what I did I understand, so I read it in Spanish.

Spanish boy: (Both) Sometimes didn't understand a Spanish word, used the English one. Read Spanish first then English. (Must have referred back to Spanish again).

Greek boy: Good idea to use both languages. If I couldn't understand it better to use the other one.

Greek boy: Sometimes it is easier for me. Sometimes I have to use both. Prefer to use both books.

Spanish girl: Sometimes I read it first in English and when I don't understand it all, read it in Spanish. Helps me to understand it.

Spanish girl: Because when I can't understand anything in the English book I look at the Spanish book

Spanish girl: Because sometimes I don't understand words in English. I look at the Spanish.

Macedonian boy: Some words I didn't understand (in English)

Italian boy: Used both for understanding better you know. I am not good reading and speaking, so that I can understand better.

Macedonian girl: If I found words difficult in English, I looked at Serbo-Croat.

Greek boy: Used both languages. If I don't know the words from the Greek one or the English one, I look at the other paper.

Spanish girl: When I don't understand something in English I look at the Spanish one, if I can't understand in English.

Spanish girl: I learn quicker with the two.

Macedonial girl: To have both. If I don't understand English I look at the Serbo-Croat.

Greek girl: Two languages useful. If you have something to understand you look at the Greek.

Greek girl: Read first in English. When I don't understand I look at the Greek.

Greek boy: It's good because I don't know something in English, I find it in the Greek, I can understand it better.

Greek boy: I like doing it in both languages because helped me a lot.

Spanish boy: Did it in English, but then I read Spanish and English. Spanish first. Someone says it in English and I read it in Spanish. I learnt so much.

Spanish boy: (Good idea) You can do the work.

3b. Focus on language learning

Greek boy: In English to learn English better.

Spanish boy: (Used both) Helped to learn more English.

Spanish boy: (Used both) To learn more English.

Yugoslav-Spanish boy: (Both) Better for me, learn English. Read Spanish first.

Spanish girl: Helped to learn English and Spanish. (Italian dominant)

Greek boy: Because you learn more English. (Both)

Turkish boy: Used both because I want to get more English. Good idea to have books in 2 languages.

Italian boy: I'll have it in both languages. I think it's better. Could be true (that it would make people lazy), but 2 languages like that help me most with English.

Greek girl: Read first in English. When I don't understand look at the Greek.

Greek boy: It's good because I don't know something in English, I find it in the Greek, I can understand it better.

Greek boy: Good to have 2 books, one Greek, one English, because I learn English.

Turkish boy: Used Turkish first then English. You can learn together. I know Turkish, can use for English.

Arabic girl: To learn English and Arabic and I read the Arabic for explanation.

These remarks reveal a striving for efficiency and thorough learning and an awareness that drawing up one's total linguistic resources helps to achieve these aims.

Besides the practically oriented remarks, there were some others worth noting as they pointed to linguistic awareness, enjoyment a curiosity.

3c. Linguistic awareness.

Greek boy: To see how different it is, you know.

Arabic girl: Both, because it is written in Arabic.

Arabic boy: Because I can read and understand both.

Greek girl: Because to see the different way. To help with English and learn about Aborigines.

Italian boy: Read the question first in English and then I'll see how it was in Italian. Nothing new in Italian, just the same.

Turkish boy: Because I like it. It's better. It is 2 languages.

Arabic boy: We like it because languages are good.

Yugoslav-Spanish boy: Better to have 2 languages.

Spanish girl: (Yes) I want to learn a lot of languages. (was told by teacher to do it in English. (From Uruguay two years ago)

Spanish girl: (Yes) I can understand in both languages.

Spanish girl: (Yes) I like to learn different languages.

Here is a reminder that bilingual learning can be intellectually stimulating. It is not simply a support for those who have to overcome a language barrier before they can fully participate in L2 schooling, but also in experience for the linguistically more sophisticated and gifted.

We can contrast the linguistically aware students with those who made an affective response. This took the form of generally approving of their bilingual learning experience.

3d. Positive feelings.

Macedonian boy: Useful to have both.

Italian boy: I liked it, it's all right.

Spanish boy: It's necessary.

Spanish boy: I like it and it's easier.

Spanish girl: (Yes) Because it's good.

Spanish girl: (Yes) I want to learn a lot of languages. (was told by teacher to do it in English) (From Uruguay, 3 years in Australia).

Finally, there is a group of students who express language loyalty sentiments. They see the bilingual texts as supportive in their language maintenance efforts.

3e. Language loyalty.

Spanish boy: (Like it) I won't forget my Spanish.

Spanish girl: (Yes) You can learn English without losing your Spanish.

Spanish girl: (Yes) I like to learn different languages.

Learning Outcomes.

Question 30: (For those who used both the texts only). When you were working with the unit, did you usually look at the English or the X first?

Question 31: Did you learn any new English words from the unit? How many?

Question 32: What about new sentences (groups of words, expressions), in English? Did you learn many of them?

Question 33: How many new words did you learn from the unit in X?

Question 34: How many new sentences (groups of words, expressions) did you learn in X?

Question 35: Have you learnt about any new things you did not know before? How many?

Answers to questions 30-34 were rarely elaborated and consisted of positive acknowledgement or a negative response to L1 and L2 learning outcomes. On the other hand, Quesion 35 tended to elicit more detailed information.

A L1 learning
No elaborated response

B L2 learning
No elaborated response

C Subject matter learning

Spanish boy: Yes, a lot, 'fertilisers' and all those words I didn't know before, 'sperms', I don't remember right now.

Spanish girl: I learnt somethings about Australian Aborigines, history, new information.

Greek boy: I didn't know anything about Aborigines before, knew nothing about Aborigines.

The spontaneous remarks at the end of interviews supports the view that students felt that they had learnt scientific concepts and were introduced to new areas of study. This is significant as one of the important Project aims is to facilitate conceptual development.

Manner of Use.

Question 35:	Did you use the texts on your own, or did you work with other students?
Question 37:	Did your teacher help you?
Question 38:	How did he/she help you? What did he/she do?
Question 39:	Did anybody else help you? Who?
Question 40:	How did they help you?

Responses to these questions give some insights into students' learning situations. The Project materials are so designed as to allow maximum flexibility, that is, it should be possible for students to learn on their own, in small groups, with the help of a bilingual or nonolingual teacher, or some other person. The quantified data shows that all these possibilities were in fact exploited. Of course, some students had help from several sources. (Spanish girl: I worked by myself but I asked others what did they think. The teacher helped. I asked about some questions, other students helped. I asked them about questions, what I thought was wrong and why. Spanish boy: Sometimes the teacher helped. She explained the words. Sometimes when I didn't understand and the teacher was busy, my friend, even tried to get it together).

A. Independent/small group work.

Those who worked mostly or entirely on their own seem to convey, in their remarks, a spirit of self-reliance, even at times of competitiveness and ambition. (Greek boy: Worked by myself. I was the first to finish). More importantly, however, the Project can induce students to co-operate.

Greek boy: With some other Greek people. Their English wasn't very good. If we didn't know something we was asking the person next to me. We were helping each other.

Greek boy: I used to work with my friends, then they went away from me, then I caught with them.

Arabic girl: My friends help me in English. I go to her and ask her about things I don't understand. They tell me.

B. Role of teachers and bilingual texts.

The composite teacher profile that emerges from the student remarks is that of a resource person who is generally available to answer questions when the need arises. Contact between student and teacher seems to be student initiated, in other words it is the student who asks the questions and not the teacher. Students seek explanations partly because of unfamiliar words in English and partly because of new concepts. Some remarks show how the bilingual texts made it possible for the L1 dominant learner to understand the explanations of the L2 speaking teacher. Other remarks show the role a bilingual teacher can play in this situation.

Spanish boy: Teacher helped by telling me what a word means.

Greek boy: Teacher answered questions.

Greek boy: Most of the time. She helped me with the sentence. I didn't understand the question. I didn't know nothing about Australia.

Greek girl: When I don't understand I ask her and she explains to me. I always understand her.

Greek boy: Sometimes for a few words I told the teacher in English. If I don't understand the Greek, I look at the English and ask the teacher.

Spanish girl: (Teacher helped) When I needed help.

Spanish girl: (Teacher helped) by answering questions. Friends helped.

Spanish girl: Explains to me some words. If we don't understand the Spanish we ask her.

Greek boy: Helped me about some questions when I don't know the answer. Sometimes I took it from the Greek. Sometimes Mrs. X explain Mr. X helped sometimes. When I don't understand some words o sentence he explained in Greek.

Turkish boy: Teacher helped sometimes. I say 'I don't get this'. He told me in English. I looked at the Turkish book and then he told me.

Most students appear to see their teachers as a resource and support, but a few remarks reveal that at times teacher roles are mainly perceived as directive.

Greek boy: Teacher helped sometimes by telling me how to read the thing and all.

Spanish boy: (Teacher) Told us what we had to do.

Yugoslav-Spanish boy: Teacher told me what to do, had no other help.

Spanish boy: Sometimes worked with my friends, sometimes alone. When Mr. X. gave us the book he told us what to do.

C. Family support.

A few students had support outside school among the members of their family. We feel that here is a potential source of learning whose use could be encouraged. It is perhaps noteworthy that some students have discovered it for themselves.

Turkish boy: Sometimes my brother-in-law helped me. He can read Turkish and English, he can write too. He told me in English, it's better for me.

Arabic boy: The word I don't know I tell it to my brother. What I don't know I ask my family. They tell me directly.

Spanish boy: My family helped, they asked me questions.

The various reported modes of learning show that the expectations of the Project designers were realistic in that the materials can be used in a wide variety of learning situations in school and in the home.

Evaluating Bilingual Learning.

Question 42:	Do you like it more or less?
Question 43:	Would you like to learn about other things this way, learn in X and in English?
Questions 44, 45:	Do you think that other students who know two languages like you would be interested to learn from these booklets

Up to this point in the interview students were mainly describing what they, their friends and teachers did and gave some reasons for their behaviour. Now we were prompting students to evaluate their experience and comment on its generalisability. Many of the evaluative responses were similar to previous statements made in response to questions 26-29. All the categories previously mentioned were represented.

A. Focus on understanding:

Spanish girl:	I think it is better to have both books all the time. It they don't understand the English, they look at the Spanish. They understand.

B. Focus on language learning:

Greek girl:	They learn languages.
Greek boy:	Good idea to try to learn English.

C. Linguistic awareness:

Greek boy:	Good idea to have 2 languages.
Arabic boy:	I like 2 languages to read.

D. Positive feelings:

Spanish boy:	It's interesting to everyone.
Turkish boy:	This book is useful.

E. Language loyalty: (was more evident in this section of the interview)

Spanish girl:	It is not very good only English. We forget our languag. That is not good. Not me but possible my brother.
Macedonian girl:	Better to study both, so that they don't forget their other language. Some people come to Australia, they lea n only English and they forget.
Turkish boy:	Yes. Everybody likes their own language.

F. Nature of bilingualism:

These questions did not only reinforce previously stated opinions, but also prompted students to reflect on learning strategies and on the nature of bilingualism. Here students often flatly contradicted each other. In contrast to the Greek boy who stated: Migrant kids should use 2 languages (in learning), or the Spanish boy: More better for them (migrant students) to understand, not confusing. There is a minority of students who find bilingual learning confusing. These questions helped to identify them and shed light on the nature of their experiences.

Spanish girl: Would use more books in English. I think, better to use only English. If you use 2 languages at the same time, me I have confusion in my head, at the same time. I couldn't do it.

Greek boy: Depends how well you can speak each language. Useful in both. There are some people who read a bit of Greek and they can't read much of the Australian work, they have to use the Greek one. Some get stuck in the Australian and they can't put their minds to Greek, they have to have English. Everybody talks English around them. Sometimes if I talk to my mum, I forget words, but they come back to me.

Spanish girl: I don't think so. If you read in Spanish and then in English you get mixed up. (She read English first, then Spanish. To help to understand). I have been here a long time (2 years), but if you have just come and you have Spanish and English all together you get confused.

(This girl stated earlier in the interview that she read the English text first, then the Spanish to help to understand what she was reading.)

It is interesting to note that the last two speakers quoted above, i.e. the Greek boy and Spanish girl, seem to be aware that if one of the bilingual's languages is weak, this may create confusion between the languages. A language may be weak because mastery in it has not progressed far enough due to a relatively short period of exposure or because the L2 has assumed a dominant role as expressed by the words

'Everybody talks English around them'. Such self-reported confusion lends further support to the argument which advocates dual language competence.

Attachment to Australia and Country of Origin.

Questions 46, 47. Are you going back to X, or will you stay in Australia? Why?

With respect to intended place of residence or visiting their country of origin, students' responses reveal that the following motives guide their preferences:

A. Place of residence of family and friends

If the majority live in the country of origin, students would like to return or go for a visit. If they have family and friends in Australia, they want to stay here.

Italian boy: Stay there. Got a lot of friends, auntie, grandmothers. Nobody here, just mother, father and brothers.

Greek girl: Just visit, because my family is here now, otherwise stay there.

Greek boy: I don't know yet. May be I'll stay in Australia, I like my friends.

Arabic girl: I would like to visit and come back. My grandfather and uncle are there.

B. Sentimental attachment to their country of origin. (See Kelman, 1972)

Greek boy: To live there all the time. With my country it is differen

Turkish boy: I am going back to stay - I don't know when - may be in 5 more years. We miss our country.

Greek boy: To stay here in 2 more years. It's our country.

Spanish girl: (Wants to visit Uruguay) I miss it.

C. Instrumental attachment to Australia. (See Kelman, 1972)

Some students appreciate the material advantages Australia has to offer.

Spanish girl: We are better now. We are here 9 months and my father has a car. We are better for buying something.

Spanish boy: (Chile - 1 year) I've got more here than I had there.

Spanish girl: There is no future in my own country. (Uruguay)

'I miss it' were added to a number of remarks.

D. Parental decision.

There is a small group of students who don't seem to have formed a personal opinion and who will accept parental authority in decision making.

Spanish boy: Whatever my father says.

Spanish boy: My father wants to stay here.

Spanish girl: (Staying) My parents like it here more.

E. Liking for Australia.

Spanish girl: I feel more comfortable here.

Spanish boy: I like it better here.

'I like it better' or 'more' was stated repeatedly by those who want to stay in Australia.

The overall impression students' remarks give is that of having settled down in Australia. During the process of adjustment to their new environment, the presence or absence of a satisfying social network provided by family and friends plays an important role. The desire to maintain links with the country of origin, by for example, visiting it occasionally, does not seem to conflict with a happy acceptance of their present environment. Similarly to the mastery of two languages, one can have an attachment to more than one country and be happy about it.

Spontaneous Remarks.

Question 48. What else would you like to say?

This question is identical with question 55 of the Student's Questionnaire. The comments that follow are a mixture of oral and written responses. We include this open-ended question on the questionnaire and the interview schedule because we wanted to ensure that the students were given the opportunity to comment freely, in other words, we wanted them to nominate their own topic. A reasonable minority were interested to accept our offer. Most of these were in favour of the Project. Clearly most students who were critical refrained from commenting. Those who did were, on the whole, of an English-speaking background and found the work too easy. If this was the case, they also found it boring. However, as our examples show, some students from an English-speaking background judged the texts too difficult.

A. Generally negative reaction:

Australian girl: I think they are useful but some of the questions are too easy. I also think Animal Families was also a bit boring.

Australian girl: I would like to say that the 'Animal Families' was simple and the simpler they are the more boring they get.

Australian girl: It was boring and too simple and dull.

Australian girl: It was too simple and repeated itself too much. It was boring.

Australian boy: It was too hard to understand it at times.

Australian boy: I would like it to be a bit easier to understand.

Polish boy: I would like to say that the units are much too easy and I would like to see them harder.

Those who approved of the texts, including the monolingual English-speakers, said how enjoyable, interesting and educational they were. They mentioned how profitable the booklets were from the point of view of imparting factual information and suggesting activities. Students also clearly stated that generally they wanted to continue using this type of learning material and liked the approach to learning, the Project has adopted. In some instances they wanted to explore a Project topic further.

B. Generally positive reaction:

(a) Enjoyable, good.

Australian girl:	I would like to congratulate you on the way you have the program.
Australian girl:	I think its all right. I liked it.
Australian girl:	I found the unit very interesting. I hope we do more.
Arabic girl:	I would like to say that I think these units are very helpful and are very good to work from them.
Australian girl:	That it was very good and I injoyed it.
Australian girl:	I think its all right. I liked it.
Uruguayan boy:	It was fun learning about animals and I'll like to learn about different animals.

(b) Informative, educational.

Greek boy:	That the unit packets were good especially Communications and I think we should have more.
Australian girl:	I enjoyed learning about animals from Australia.
Australian girl:	I think these units were very educational to know about Australian animals more.
Arabic girl:	I would like to say that I have learnt a lot about animals and it was interesting.
Italian girl:	It was very interesting and I learned more about animals and the way they behaves.

Australian girl: That it help me to know about animals and it was good to learn from the book and more children should learn about it.

Australian girl: They help you to learn about the animal families much better.

Australian girl: That I think that these units are good because you can learn a lot more about animals.

Australian girl: I think this unit was very interesting and helpful too. It was very good information.

Australian girl: It was quite interesting and I have gained much knowledge about animals that I didn't know before, therefore I think it is quite a good idea.

Australian boy: I would like to say that I enjoyed it very much and I learnt a lot about communications.

Turkish boy: Learnt a lot about animals.

(c) Stimulating further study.

Australian girl: I enjoyed it very much. I'd like to continue deeper into Animal families.

Australian girl: I would like to say that I liked that book and enjoyed it.and I learnt very much and I am now more interested in Science.

PARENTS' QUESTIONNAIRE

In Chapter 3, detailed information has been presented on the characteristics of the sample of parents. Some of this information was obtained from the students' questionnaire (N=281), and further detail concerning attitudes was obtained from a questionnaire administered to a smaller sample of parents (N=46). The quantitative data from this questionnaire have already been discussed and we now present some information gleaned from parents' written comments.

Parents were stimulated to give elaborated responses to Questions 33 and 34. Do you think bilingual education is good for your child? Why?

Some parents also availed themselves of the opportunity to nominate their own topic for comment. Question 58. Anything else you would like to say?

We were not only interested in the attitude of parents to bilingual education, but also in the reasons for supporting or rejecting it. We believe that information of this kind can guide teachers in the manner of implementation of bilingual programmes.

Parents perceived bilingual education in terms of:

1. Value/Usefulness

   (a) Unspecified

   (b) Benefit to the individual:

   Spanish: Because she'll speak two languages.

   Spanish: Because I would like him to learn more languages.

   Lebanese: It is better for him.

   (c) Benefit to society:

   Greek: Because my child, if he knows two languages, he will be able to understand more things and so be useful in the society.

2. For Communicating with

   (a) Parents -

   Greek: I would like my daughter to understand what I say.

   (b) Others -

   Spanish: Because she'll speak two languages.

Turkish: When ever he go to the foreign country it is easy for him.

Greek: Because he can communicate with a lot of people.

3. For Maintaining Culture.

Spanish: For his culture and his future.

4. For Career Reasons.

Turkish: He can find job easier.

Greek: That would be very useful in his later life and career.

Yugoslav: Better employment opportunities.

5. The Australian Environment.

Lebanese: Because he wants to live here so it is very important.

The spontaneous remarks support the English learning aspect of bilingual education.

Greek: I would like very much to help my children if I could but I can't do this because I don't know the English language. But anyway I want my children to learn English as fast as possible.

Lebanese: Many thanks for your school and in particular your university for the help you have been offering to our children in order to learn the English.

Turkish: If it was possible for the teachers to teach more English to make them easier to follow the subjects.

Yugoslav: I hope my daughter will learn perfect English but not her own language so she will have a good future in Australia.

In addition they recognize bilingual education:

6. For Learning English.

Spanish: Because it helps him to understand English.

7. Facilitating Learning,

Lebanese: Yes, because if he knows more than one language it is better and he will be all right.

and express

8. General Satisfaction and Gratitude.

Turkish: We are very pleased for your help, thank you.

Spanish: What I want to say is "thanks" for the help that each school is giving to the children.

Lebanese: I can't say something else except I thank you very much for the help you are doing for us and for our children.

Lebanese: Thank you very much for this value step which you offered to us and I hope my answers are all right.

The latter were the most numerous of the spontaneous remarks.

These responses support previous findings (Claydon, Knight & Rado 1977) which show that migrant parents value bilingual education for two kinds of reasons, namely, those of a general, more idealistic type referring to education and culture, and those that have practical implications. The latter refer to better career prospects, the need to learn English, the possibility of wider communication, but also to the need for easy communication within the family. The latter deserves special attention as it is often overlooked. On the whole, it can be said that parents have a reasonable general understanding of the implications of bilingual education.

SUMMARY.

If we compare the elaborated responses of teachers, students and parents, we find a common general awareness of the educational needs of bilingual students in terms of their immediate learning situation in the Australian school context and the demands they will have to meet in future. This is reflected by a strong pre-occupation to become competent in English, but also by a demand for quality education. Teachers and students see quality education more as subject matter learning, in other words, conceptual development, whereas parents in the spirit of a long standing educational tradition, see it more as knowing languages. Parents also have a personal interest in bilingual education as a means of maintaining their ethnic language and culture. As indirect participants they seem unaware of the complexities of bilingual education in the classroom, and as relative newcomers, its significance for multiculturalism in the Australian speech community.

In contrast, teachers and students who are directly participating in bilingual education see it as a learning process with a detailed appreciation of its effects on the individual learner and on groups of learners. Their remarks illuminate questions of classroom management, including teacher and student roles, expectations, and ways of understanding what it means to be bilingual. The value of juxtaposing their remarks lies in the manner in which they complete each other. For example, the question of bilingual, bicultural identity which looms large in the current Australian and overseas literature (see Schools Commission, Ethnic Affairs Council, Education Department, Smolicz, Martin, Andersson, La Fontaine et al , Giles, and many others), and which receives some attention from teachers becomes tangible through the students' remarks. Their attachment to language, culture, family and nation is a reality that demands attention. Further their appreciation of language skills and their general approach to learning, together with an ability to make decisions with respect of language choice, are a useful reminder that migrant students have a promising learning potential. The onus is on the school to exploit this potential.

CHAPTER VI

RESULTS AND DISCUSSION: STUDENT GAINS IN ACHIEVEMENT

CONTENT MASTERY

In order to examine the gains in content mastery of students using the Multilingual materials, achievement tests were developed to accompany each unit. The procedure was as follows:

For each unit of work, two multiple-choice tests were developed. Each was intended to cover content ranging over the whole of the unit, and as far as possible, the tests were of equal difficulty. The achievement of this objective was dependent on the personal judgement of the test constructors, supplemented where possible by the random allocation of pairs of items to the two tests. For later reference the two forms were labelled 'P' and 'T'.

All teachers joining the Project were asked to allow their students to be tested on the unit content before and after their using the materials. On the pretest forms P and T were alternated so that some students received form P and others form T. On the posttest, each student received the form of the test other than that with which they had been pretested. The purpose of this procedure was to enable gains in achievement to be detected in spite of whatever unintended differences in difficulty might arise between the two forms of the tests.

Upon commencement of the unit, the proficiency in English of all students was assessed, using Reading Comprehension section of the Progressive Achievement test (A.C.E.R., 1970). Problems arose in this regard. The origina intention was to administer the tests strictly in accordance with the standardization procedures, and to use standardized scores in all the analyses which followed. The structure of the test is somewhat unusual. One test is provided and the items are divided into groups of sequentially increasing difficulty. The starting- and finishing-point for each pupil depends on grade-level, so that pupils from different grade-levels do different, but somewhat overlapping tests.

Serious difficulties arose in the administration of the tests. Upon the first attempt to administer them, the research assistant reported that the students (whose command of English appeared to be shaky at best) had found the 'appropriate' items so difficult that very few had been able to attempt to answer them. After two more experiences of this kind, a decision was made to abandon the attempt to maintain standardization procedures. Instead, all children were instructed to answer the first 60 items of the test, corresponding to the grade 3 and part of the grade 4 sections. This they seemed to be able to cope with, and the procedure was continued throughout.

As a result, we have no scores which can be referred to any standardization sample or published norms. The scores we have are raw scores out of 60, from a test which has well-established content validity, and the only interpretations which can legitimately be made are comparisons within the sample. The decision to use the test in this way was made with regret, but the only alternative at the time seemed to be to abandon testing altogether, since it appeared likely to be a futile exercise with potentially damaging effects on the children's attitude to the project materials.

In retrospect, we may have over-reacted. The children's performance on the test was much better than appeared likely at the outset. Raw scores on the 60-item test are summarized in Table 6.1.

TABLE 6.1

SUMMARY OF SCORES ON ENGLISH COMPREHENSION TEST

Score Interval	Raw Frequency	Per cent
0 - 10	6	2.6
11 - 20	24	10.2
21 - 30	12	5.1
31 - 40	39	16.6
41 - 50	76	32.3
51 - 60	78	33.2
TOTAL	235	100.0
Mean	42.4	
Standard deviation	13.8	

Although there were still substantial numbers of pupils who were unable to perform well on items at grade level, it is clear that the majority did quite well, and a more difficult set of items might have been psychometrically more effective. Nevertheless, the raw scores cover virtually the whole range of possible scores (6 to 60) and the test is clearly distinguishing different categories of students as regards their English comprehension. This enables us to use it as a means of comparing pupils with differing levels of English comprehension.

There were other respects in which our intentions were unable to be realized. During the period of the study, the vast majority of teachers and pupils were using the unit Animal Families (the best-established of the units) and very few were using any of the other units. As a result, we are forced in our comparative analyses, to look only at achievement on the unit Animal Families. Although it would be desirable to have comparative information based on a wider selection of units, we see ourselves as bound by a commitment to use only volunteer teachers in our research, and to allow them the freedom to choose units to fit the needs of their own school situations.

Table 6.2 presents descriptive information on the pretest and posttest scores for the units Animal Families, Communications, Melbourne, and Myths of the Australian Aborigines. In addition, scores were available for two pupils on the unit Buying, and two pupils on the unit Libraries. No meaningful statistics could be presented for these.

TABLE 6.2

PRETEST AND POSTTEST ACHIEVEMENT SCORES

Unit		Pretest	Posttest	Difference in Mean Score
Animal Families	N	206	211	
	Mean	10.58	13.20	2.62
	S.D.	3.54	4.83	
Communications	N	17	17	
	Mean	14.53	15.47	0.94
	S.D.	1.97	1.97	
Melbourne	N	24	24	
	Mean	8.50	11.42	2.92
	S.D.	3.05	3.91	
Myths of the Australian Aborigines	N	12	12	
	Mean	6.75	12.67	5.92
	S.D.	2.63	1.44	

In each case there was an increase in mean score from pretest to posttest, although the difference was only moderate (less than one standard deviation) for three of the four units. The mean gain was less than one score point for the unit Communications, but the relatively high pretest mean (over 72 per cent) indicates that the test focussed on material about which the pupils had fairly substantial prior knowledge. Gains appeared most substantial for the unit Myths of the Australian Aborigines, where the mean score almost doubled from pretest to posttest. This, of course, covers material about which city and inner-suburban children might be expected to have little prior knowledge, and the data tend to confirm this.

For Animal Families, upon which most subsequent attention was given, the increase in mean score was 2.62, which does not seem as large an increase as might have been expected, even though it represents about three-quarters of a standard deviation, based on pretest scores. It still only represents an increase of two to three correct answers per pupil, and in a test of 20 items this does not constitute a great reward for the amount of work done. Of course, this is not to suggest that improvement in achievement test scores is the only desired outcome of the units. It is not, but it is one of them. A detailed breakdown of the gains in score on the unit Animal Families is provided in Table 6.3

TABLE 6.3

GAINS IN SCORE: ANIMAL FAMILIES

Score Interval	Frequency	Per cent
8 to 11	15	7.3
4 to 7	62	30.2
0 to 3	84	41.0
-4 to -1	39	19.0
-8 to -5	5	2.4
TOTAL	205	100.0
Mean	2.30	
Standard deviation	3.54	

If gains of four points or more are thought of as substantial (a subjective judgement, admittedly) only 37.5 per cent of the pupils could be thought of as having made substantial gains, and (perhaps more disappointing), only 67.3 per cent made any gain at all. Although practice effects should have been minimized by using posttest which were different to pretests, the possibility that a proportion of the gains arose from practice in taking the tests cannot be dismissed.

These disappointments notwithstanding, we still view it as worthwhile to ask the question: are there subgroups within our sample for whom the gains in achievement were greater than or less than would otherwise have been expected? For this purpose, further data were collected from the pupils which could be related in various ways to their achievement gains. These data will first be summarized, and then the realtionship with achievement will be discussed.

The language in which the students took the test was thought likely to be a significant factor. Pupils were given the option of doing a test in English, in another language of their choosing, or taking copies of the test in both languages. We were surprised enough when almost 60 per cent of our total sample of 281 claimed English as their first language. We were much more surprised to find that in the slightly reduced sample of 258 who were pre- and post-tested, 242, or 93.8 per cent claimed that English was their first language. Although it is possible that the pupils who, for whatever reason, were absent on the days of testing, or otherwise avoided it, were non-English-speaking, it is apparent that, when the tests were being administered, a number of pupils changed their descriptions of themselves from having English as a second language to having English as a first language. Not being able to identify which pupils so changed, we can only speculate upon their reasons. Possibly a pupil might, when being interviewed or when filling out a questionnaire, claim English as a second language only, perhaps as a way of attracting attention, help or sympathy. The same student, when asked in the context of a test administration, might claim English as a first language, because anything else could be inconsistent with his/her doing a test which was written in English, and it is clear that the vast majority of pupils did want their test papers to be written in English.

We present, in Tables 6.4 and 6.5, the first and second languages claimed by the tested sample, and in Table 6.6 the languages in which they chose to do their pretests and posttests. These tables demonstrate something of the dilemma facing bilingual students who may be sufficiently fluent in each language to be unclear as to which one they regard as their first language.

TABLE 6.4

FIRST LANGUAGES CLAIMED BY TESTED SAMPLE

Language	Frequency	Per cent
English	242	93.8
Greek	4	1.6
Arabic	1	0.4
Spanish	10	3.9
Macedonian	1	0.4
Total	258	100.0

TABLE 6.5

SECOND LANGUAGES CLAIMED BY TESTED SAMPLE

Language	Frequency	Per cent
English	1	0.4
Italian	72	27.9
Greek	19	7.4
Turkish	8	3.1
Arabic	17	6.6
Spanish	16	6.2
Others	30	11.6
No second language	95	36.8
TOTAL	258	100.0

TABLE 6.6

LANGUAGES OF PRETESTS AND POSTTESTS

Language	Pretest		Posttest	
	Frequency	Per cent	Frequency	Per cent
English	199	77.1	207	80.2
Italian	1	0.4	1	0.4
Greek	12	4.7	10	3.9
Croatian	4	1.6	3	1.2
Turkish	5	1.9	5	1.9
Arabic	8	3.1	8	3.1
Spanish	21	8.1	21	8.1
Other including combinations of above	8	3.1	3	1.2
TOTAL	258	100.0	258	100.0

WHO GAINED?

We approach this problem in two ways: first, using a descriptive approach, supplemented by tests of significance only where necessary to qualify or refute apparent trends in the data; secondly, by the use of formal inferential procedures, which, in effect, test hypotheses concerning the fit of the data to one or more particular linear models.

In the first part of the analysis, then, we look at the gains in achievement on the unit as a function of some pupil characteristics. The characteristics thought to be potentially most important were proficiency in English, first language, and sex.

For descriptive purposes, proficiency in English was categorized into three levels, corresponding to scores of 6-39, 40-50, and 51-60. This gave three nearly equal groups, with frequencies of 78 (low), 79 (middle) and 78 (high). Several related variables could have been chosen to represent the child's first language - the response to the question itself, the language in which the child chose to do the pretest, the language in which the child chose to do the posttest. Whatever choice was made, the huge majority would have been categorized with English as their first language. In the event, the language of the pretest was chosen, in the hope that their choice in that situation may have better represented their own perceptions about themselves than their response to the question, to the extent that there was a difference. Language of post-test would have been an equally defensible choice. Because the vast majority chose English, it was not possible to analyse the various languages separately. Instead, the only categories presented are 'English' and 'other'. Results are presented in Table 6.7

TABLE 6.7

ACHIEVEMENT GAINS, BY FIRST LANGUAGE

First Language	Achievement Gains			Statistical Test	
	N	Mean	S.D.	F	P
English	181	2.00	3.46	11.9	.001
Other	24	4.58	3.40		

Pupils with first languages other than English did gain significantly more than those whose first language is English. The difference was around 2½ points, which corresponds to about two thirds of a standard deviation, whether taken on gain scores or pretest scores. The difference is statistically significant ($p < .001$), and, although modest in size, does suggest that the materials serve a valuable purpose for students whose first language is not English. This conclusion is clouded by the apparent tendency of pupils to choose English as their medium of learning, in spite of their fluency in another language. The curriculum materials were designed to allow pupils to make maximum use of all their language skills, and the results suggest that benefits accrue to both language groups, although slightly more so to those using languages other than English. Teachers of English-speaking pupils seem to simply view the multilingual materials as good curriculum materials, of value with or without their multilingual aspect.

The next factor examined was proficiency in English. Although we had divided the sample into three virtually equal groups (78, 79, 78) on the basis of their English proficiency, the comparison groups, when gain was examined, proved to be decidedly unequal (see Table 6.8)

TABLE 6.8

ACHIEVEMENT GAINS, BY ENGLISH PROFICIENCY

Proficiency in English		Achievement Gains		Statistical Test	
	N	Mean	S.D.	F	P
High (51+)	71	1.88	3.24		
Middle (40-50)	71	2.07	3.51	1.0	.37
Low (39-)	43	2.81	4.00		

There were no significant differences among the three groups, indicatin that achievement gains were spread across all levels of English proficiency. Aside from being statistically insignificant, the differences were of trivial magnitude, amounting to less than one score point in a test of 20 items. The most notable feature of the table is the lower frequency in the group with lowest proficiency in English. Given that the grouping into high, medium and low was done so as to produce groups of nearly equal size, the difference can only come about through students who had completed the A.C.E.R. test being absent for one or other of the pretest and posttest, or doing units other than Animal Families. Why they should come predominantly from the lower group is not clear, but the comparisons between means would not necessarily be affected

Given that the sample was predominantly female, and given in particular the presence of a large group from one girls' school, the straight comparison between sexes should not be over-interpreted (see Table 6.9)

TABLE 6.9

ACHIEVEMENT GAINS, BY SEX

Sex	N	Achievement Gains Mean	S.D.	Statistical Test F	P
Male	33	4.24	3.61	12.46	.001
Female	172	1.93	3.42		

Males gained more than females, about 2 points more on average, but given that they were not in the same group of schools, there is no reason to attribute these differences to sex in particular, when they could just as well reflect differences in teaching methods, use made of the materials and so on. An analysis which looks simultaneously at the effects of all three variables, although less descriptive, would enable us to avoid this potential difficulty.

Such an analysis was performed. The procedure used was analysis of covariance. The criterion variable was gain in achievement, the two factors examined were sex, and language of pretest, and the A.C.E.R. (English proficiency) score, without recoding into high, medium and low, was used as a covariate. For those not familiar with analysis of covariance, the procedure addresses the following questions:

(a) Are achievement gains significantly related to English proficiency?

(b) Over and above any relationship which may exist with English proficiency, do the gains differ according to sex, or to language of pretest?

(c) Again, once any relationship with English proficiency is taken account of, is there evidence of any interaction between sex and language of pretest with regard to their impact on achievement gains?

The results of the analysis of covariance are summarized in Table 6.10.

TABLE 6.10

ANALYSIS OF COVARIANCE OF GAIN SCORES

Source of Variation	Sum of Squares	df	Mean Square	F	Significance
Covariate (ACER Score)	39.4	1	39.4	3.31	.05
Sex	43.1	1	43.1	3.68	.05
Language of pretest	18.8	1	18.8	1.58	.05
Sex x language (interaction)	16.5	1	16.5	1.39	.05
Residual	2215.7	186	11.91		

The conclusions which can be drawn from Table 6.10 are that ability to profit from the use of the multilingual materials (as measured by achievement gains) is not significantly dependent on sex, on the student's choice of language (English/non-English), on the interaction between sex and choice of language, or on the student's English comprehension. The observed difference between the mean scores of males and females cannot be interpreted as being attributable to sex alone, but can be accounted for in terms of imbalances among the sample.

The lack of relationship with English proficiency is in fact an encouraging result given the aims of the Multilingual Project. Without multilingual materials, pupils whose first language is not English are frequently at a substantial disadvantage in many areas of the curriculum, where their lack of English proficiency prevents them from reaping the full benefit of the teaching which is provided. The results of this study indicate that lack of proficiency in English is no barrier to progress in this curriculum area at least. Two features of the curriculum materials have probably contributed to this achievement:

1. the provision of materials in the child's own language, and
2. the careful structuring of the materials with a view to the provision of multiple opportunities to learn.

SUMMARY

The difficulties and surprises surrounding this area of the investigation highlight the problems pertaining to the assessment of bilingual students' school achievement. As our experiences show, reading comprehension tests in English administered to these students are unsatisfactory as many cannot even attempt them. For lack of sufficiently homogeneous linguistic minority groups, it is not possible to develop language tests in the students' ethnic language. Consequently, one cannot gain a true picture of their bilingual la[illegible]age competence. The fact that students who were unable to cope with the English Reading Comprehension tests chose to do the Multilingual Project tests in English and could not only show good results in the pretest, but improve on these in the posttests, illuminates the nature of bilingualism. The information gained from student interviews supports the assumption that a fair proportion of students used the texts bilingually. Theoretically, this ensured full understanding and so facilitated effective learning. Once this has taken place the language in which known information is repressed is of lesser importance.

There is some evidence (Ben-Zeev 1977), that in the course of bilingual learning development the bilingual's vocabulary in each language is smaller compared with that of the monolingual. Clearly developing two languages instead of one contributes an extra large load. We have no data on the comparative size of the lexicon of bilingual adults. One could assume, however, that an adult's dual vocabulary range would depend on the functions his languages fulfil. What has to be remembered is that the relationship between a bilingual's language is dynamic. With respect to sentence structure, Ben-Zeev reports that the sentences of the bilingual children she studies "were as complex as those of the monolingual, as measured by per centage of clausal sentences." (1977: 35 However, in the context of story telling, bilinguals made significantly more grammatical mistakes. Such findings should serve as a warning that bilingua language development is more complex than monolingual language development. This should be taken into account in teaching and assessing bilinguals. Fur they highlight the need to distinguish between an individual's semantic syst versus the linguistic system. There are other ways of expressing meaning, e visual arts, music, dance. The internal code can be seen as the interface between language and thought, in other words the knowledge of the world, the sum total of our concepts (see Foss and Hakes 1973).

This could explain, in part, why our bilingual students could manage the texts in English even if, in many instances, it might have been their weaker language. They could handle *known information* in such a language. It is during the concept learning process, during the acquisition of *new information* that language plays such a significant, decisive role. This is where the language or languages become a critical factor. Consequently, we felt justified to apply the principle of free language choice also to our testing procedure. Cohen, in the context of discussing the extensive restructuring of sentences and passages of text in memory, states that some "experiments suggest that items are stored as non-verbal concepts, and are independent of the original wording, or the *original language*", (1977: 10)

Undoubtedly student behaviour with respect to language choice in a learning versus testing situation deserves further investigation. A pilot study (Rado and Lewis, and Lewis and Rado 1980) bilingual students have positive attitudes towards language learning and bilingual education, but perceive their teachers' and friends' attitudes as negative. From this one might conclude that bilingual students may publicly opt for the use of English for the sake of teacher and student approval. Such behaviour may be markedly different from opinions expressed during a private interview or behaviour in an individualized learning situation. In sum, there may be good reasons for seemingly inconsistent student behaviour.

CHAPTER VII

CONCLUSION

IMPLICATIONS

1. Curriculum Development

The Project has demonstrated what the essential features of bilingual texts are if they are to serve independent study in small groups. These features include control of language complexity, so that texts can be understood by learners without teacher mediation. Explanations, tests, suggested activities are integrated into the texts.

If we accept that bilingual texts can serve a useful purpose at the junior secondary level in the Social Sciences, it stands to reason that they could be employed in other subject areas. Such horizontal extension could be accompanied by a vertical expansion to upper and lower years. Moreover, the range of languages could be increased to serve some of the smaller ethnic groups, e.g. Portuguese, Russian.

The production of multilingual learning materials is so complex that it is not envisaged as school-based. However, it is acknowledged that curriculum developers and schools should work in close co-operation.

We consider school-based curriculum development as a process of selecting, adapting, commissioning curriculum materials from specialist bodies. This would ensure that curricula are individually tailored to schools, of a suitable standard, in the appropriate range of languages. Staff cannot be expected to simultaneously teach and develop learning materials. Teachers lack the expertise and necessary time. If they are relieved of the burden of writing their own materials, they can devote all their energy to syllabus design and lesson planning.

If bilingual education is offered as a component of a multicultural curriculum, it should be closely linked to the teaching of English and the ethnic languages. Such a linking could enhance the Language development aspect of bilingual learning.

We can envisage a multicultural curriculum without a bilingual education component. This is in harmony with our view that bilingual education be optional. But we reject the notion that a curriculum can be multicultural without including a second or several language learning components. Language learning is the most direct cultural experience that can be offered. It brings the learner face-to-face with alternative modes of expression and behaviour. This is an essential preparation for membership in a multicultural society. The low reputation that language teaching seems to have in Australia is not relevant in a discussion of principles. Firstly, we have many instances of good language teaching in Australia as exemplified by our past and present undergraduate population in tertiary language departments. Secondly, language teaching can be upgraded by means of in-service courses in a relatively short time. The latter is particularly pertinent as language teaching methodology has made great strides in the late 70's on the basis of sociolinguistic insights. But language teaching is not a complete solution to the language learning question. It is a necessary but not sufficient component of a genuine multicultural curriculum. Its effectiveness can be significantly enhanced by bilingual learning.

Those who would exclude the learning of languages from the core curriculum (C.D.C. 1980), see it as superfluous or ineffective. Such opinions seem to be based on observation of existing school curricula where the language component is an adjunct rather than an organic part of the total curriculum. Community language teaching is often seen by the school as a concession, a gesture to satisfy the migrant population. Anglo-Australians are not expected to participate. Offered in this spirit it can be divisive and defeat its own purpose.

As a study into language attitudes shows (Rado, Lewis, Foster 1980), many students are adversely disposed or perceive the school climate as negative towards the maintenance of ethnic languages. It is our conviction that if the teaching of languages were made an organic part of the curriculum, it would gain comparable status with other subject areas and be better able to fulfil legitimate expectations. The procedures to be adopted for the integration of language teaching in the curriculum are similar to those required for integrating bilingual education.

2. Teachers

(A) Teacher training.

The general provisions for initial and continued teacher training will not be discussed here as recent educational literature deals with it in some detail. However, for the successful implementation of some form of bilingual education, teachers need to become familiar with specific theories and acquire specific skills.

(a) With respect to theory, monolingual and bilingual teachers whether working as subject matter or language teachers, need to master those linguistic (this term subsumes psycholinguistic and sociolinguistic) concepts which illuminate the nature of language, first and second language acquisition processes and language use. This knowledge is essential for the understanding of bilingualism and bilingual learning. This understanding in turn is essential for organising optimal learning situations where several languages fulfil an instructional role. For example, teachers need confidence to allow students to choose the language of instruction when acquiring new knowledge. The understanding that knowledge, most probably, is stored in semantic memory in a non-verbal form, independently of the input or output (Cohen 1977) language, should help to build up such confidence. It may also encourage teachers to alternate the language of initial learning and the language of revision as this is as efficient as monolingual learning and revision, with the additional advantage of practice in two languages (Kolers 1968).

Familiarity with some aspects of linguistics would also enable teachers to handle language universals, comparisons across languages, and socially compulsory style variations in an appropriate manner. This is an area where at present a great many teachers are misinformed. Without a theoretical background, they are not in a position to judge what is sound and what is false information.

Our study shows that bilingual texts encourage students to use their linguistic awareness. This is a strength bilinguals display generally (Slobin 1978). Researchers are now exploring the advantages of linguistic awareness. Conclusive results are not yet available. However, there are strong indications that, for example, it plays a significant role in initial reading. Teachers familiar with such issues could exploit bilingual learning in a way that it will stimulate linguistic awareness.

Similarly, if teachers wish to focus on the language teaching potential of the bilingual texts, they need linguistic knowledge. The latter is particularly important when dealing with discourse *factors*, in other words the attributes of connected texts. It is important to maintain a balance between oral and written skill particularly in the case of older bilingual children. It must not be forgotten that the school is largely responsible for developing literacy skills, whereas oral skills can sometimes be learnt out of school. For example, many migrant children attain a remarkable degree of oral fluency by verbal interaction with members of their family and ethnic community.

(b) Closely connected to verbal communication is the study of *non-verbal communication*. This has a two-fold significance for teachers.

Firstly, it has explanatory power with respect of classroom behaviour which appears unacceptable in the Australian classroom.

Secondly, teachers need to be aware of a variety of techniques in non-verbal communication to facilitate understanding, both on the personal and conceptual plane. The latter implies the intelligent use of technical aids. These include the use of tape recorders set up in pairs so that both the English and ethnic language versions are readily accessible to the student.

Besides such practical matters, some theoretical insights into the role of visual imagery in semantic memory may be useful. Reading graphs and maps are important study skills and the Multilingual Project provides practice in these. It also uses a range of other illustrative materials in the form of line drawings, slides, photographs etc. We must, however, keep in mi that such information unless coded as well in verbal form by the learner is difficult to retrieve. This explains why deaf children often suffer a cognitive handicap, while blind children don't (Cohen 1977). It appears that migrant children weak in English are in some respects in a similar situation to the deaf, in that the verbal input they can handle is limited in English. However, as a rule, they have access to another language, a crucial difference.

(c) All teachers handling multilingual materials need specific skills in classroom management, that is, individualised instruction, particularly sub-grouping. It is essential to ensure continued interest in learning where students study individually and to keep groups working efficiently with full student participation. However, familiarity with intragroup dynamics is not sufficient. Intergroup relations must also be taken into account.

There is research evidence (Tajfel 1978) that group membership even if groups are formed on the most trivial grounds, induce group loyalty. Such in-group feelings can manifest themselves as hostility towards out-groups. It is, therefore, essential that the sub-grouping the Project advocates is counterbalanced by whole group activities organized for a common goal.

The best use of the materials, therefore, with respect to facilitating intergroup relations (whether Anglo-Australian and migrant, or migrant and migrant) is in whole classroom situations where groups can be organized according to various principles, e.g. language, different activities. With a rotating group membership, the danger of intergroup hostility would be lessened and the awareness of commonality in learning enhanced.

Team teaching with other teachers or teacher aides requires careful planning. Content of lessons and classroom procedures to be adopted must be worked out in detail to ensure smooth execution and the maximization of resources.

(B) Teacher attitudes.

It is difficult to compare the attitudes of teachers experienced with the Multilingual Project with those of others, as the bilingual education research literature (except for some reports from teachers in Aboriginal Bilingual Schools in the Northern Territory) rarely mentions teacher opinions. Discussions focussing on bilingual education are directed towards persuading teachers of the merits of bilingual education, combating teacher prejudice towards minority children, and the dissemination of information. The latter is oriented towards teacher education in curriculum and syllabus design, teaching materials and methodology.

The lack of information on teachers' perceptions of the role of bilingual education, both in the general context of schooling and with regard to invididual students is somewhat puzzling as these play an important role in the success or failure of bilingual programmes. In the present period where much planning for multicultural education, which sometimes includes bilingual education, is taking place, researching teacher attitudes should be useful. It would be relatively easy to collect such information. As well, research which draws on teacher attitudes involves teachers in the research process in a more active way. For example, teachers may at one and the same time examine their own, perhaps non-consciously held, attitudes whilst they are revealing them to researchers. They can then use the insights which arise from such reflection to alter and improve their pedagogical practices.

(C) Teacher aides.

Teacher aides have an important role to play in the multilingual classroom. Their intelligent deployment in the school, individually or in groups, would offer a wider range of students a linguistic support system. Comments from teachers indicate that, even though the Project materials are designed with the needs of the monolingual teacher in mind, teachers themselves feel that they would benefit from the presence of bilingual/multilingual personnel working with them. Teachers have now had greater access to teacher aides (through programmes supported by the Schools Commission). Thus, teachers in this study have recognized the potential of differentiated staffing in the multilingual classroom. (See Foster, Stockley 1980)

3. Students

Students seem to be aware that bilingual education is a strong form of language maintenance. Because of overt or covert assimilationist pressures or other factors, they may consciously or non-consciously reject it. This can be avoided by preliminary discussions with students so that those who are interested in participating are fully informed about the advantages and also immediate practical implications of bilingual education. In some instances, it may be advisable to offer students a trial period in bilingual learning where various approaches could be explored in the alternate handling of texts. If approached in this way the likelihood that students will regard bilingual education as a remedial, stop-gap measure will be lessened.

Students in a bilingual programme should be encouraged to make their work public in the form of periodic or year final displays or other types of presentation, e.g. mime, music. This serves as a feedback to all students whether participants or non-participants in the programme, but also to the staff and parents. Such dissemination of information should help to maintain and develop bilingual programmes.

4. Parents

Similarly to students, parents should be fully informed about the nature of bilingual education, the subject areas involved and the manner in which it will be handled. Its transitional and maintenance aspects should also be discussed. Parents who object to bilingual education often do so because they think it will adversely affect their children's English and general progress in school subjects. Unfortunately many teachers reinforce such misconceptions.

Parents could also be shown the role they could play in bilingual education; by serving as resource persons with respect to cultural knowledge and ethnic language. Just as parents can enrich a bilingual programme, it can be pointed out to them that they can also profit by it personally by putting them in touch with a body of knowledge in their own language and English.

Contact with parents should be established on a regular basis. This would be beneficial for intergroup relations, for the airing of any problems, and for keeping parents informed about successes and developments in the programme.

5. Administrators

In addition to being familiar with the theoretical and practical aspects of bilingual education, administrators need to appreciate the fact that it is an optional form of education. The difficulties alternate schooling creates are being overcome by mini schools or annexes. Such solutions make bilingual education feasible. It is essential, however, that close contact is maintained between the two schools and that there are a number of joint activities. In particular the premises and other facilities must be of equal if not higher standard than those provided for the rest of the school.

REQUIREMENTS OF BILINGUAL EDUCATION

1. Staffing

Native-English speaking teachers, bilingual teachers, and/or bilingual teacher aides and librarians willing to take special purpose language courses in addition to the part-time services of interpreters and translators would be desirable. The school should also have access to a consultant applied linguist.

2. Community involvement

All ethnic groups including Anglo-Australians which the school serves should be represented on its advisory committees. The school should encourage direct community participation in the play ground and classroom. A member of staff could be appointed to co-ordinate such participation.

3. Services to the community

The school should become an educational and recreational centre for its community. This would facilitate intergroup relations and so lessen the assimilationist pressure on the children.

4. Curriculum

In order to be acceptable to and profitable for students, bilingual education (and also learning languages other than English) must be an organic part of the whole school curriculum. If it is simply an adjunct, it is at the mercy of too many non-educational factors which may jeopardise its successful application.

The school must organise its curriculum in such a way that culture and language receive due attention in the nine areas of knowledge specified by the Curriculum Development Centre (C.D.C. 1980: 18-19). This implies curriculum variation across schools with varying emphasis on certain cultures and languages. But there will also be commonality with respect to the Anglo-Australian, Aboriginal and some other cultures not necessarily represented to a significant degree in Australia but of special interest to us, e.g. Papua New Guinea.

5. Library facilities

The school needs reference and fiction material in print, but also in other forms, in English and the languages of its community. The language requirements are unstable because of the changing nature of communities as new arrivals often take over the cheaper housing of the earlier groups who, in the meantime, have become more affluent. Schools could initiate an exchange system to cope with this fluid situation in a way that conserve resources. Adults literate in the children's languages should be accessibl to them during certain borrowing times and library periods.

6. Technical aids

Teaching aids play an important part in individualized instruction. This implies that priority should be given to aids the students can handle themselves.

RECOMMENDATIONS

A. Courses in Applied Linguistics

(a) Initial courses to introduce teachers to the relevant linguistic concepts.

(b) Continuing courses to keep teachers abreast of new developments (this is a rapidly developing area).

(c) Workshops for practical demonstration. It must be stressed that single-day seminars are appropriate for (c) but not (a) and (b) above. The latter must be offered as courses of some duration and substance.

(d) Sessions on non-verbal communication and learning.

(e) Sessions on technical teaching aids, the manner and purpose of their use.

(f) Sessions on individualised instruction, particularly sub-grouping.

(g) Sessions on team teaching with other teachers or teacher aides.

(h) Sessions for teacher aides.

(i) Sessions for school librarians on building up collections in other languages and on making the best use of these, e.g. organizing volunteers to read aloud to groups of children, taping texts etc.

(j) Regular consultation with parents. A record to be kept of these.

(k) Consultation with students.

(l) Dissemination of information on some outcomes of bilingual learning, e.g. displays.

(m) The development of multicultural curriculum models with a bilingual education component.

(n) Sessions with administrators on the implementation of bilingual education.

(o) The development of bilingual learning materials in the form of parallel texts. All learning materials should be available in English and at least one other language. Evidently this proviso cannot in practice be extended to reference materials desirable as this may be in theory.

(p) The extension of bilingual materials to all age groups, and a wider range of subjects and languages.

(q) Seminars on exchange of information of experiences in bilingual education on a regional, state and national basis.

(r) The establishment of a clearing house for bilingual education which could co-ordinate activities, disseminate information and liaise with schools and teacher training institutions. The Ecumenical Migration Centre fulfils some but not all these roles. Similarly the Australian Institute of Multicultural Affairs has a much wider scope.

B. Research

(a) Further investigation of teacher, student, parent and general community attitudes towards community language learning, bilingualism and bilingual education.

(b) Document the spontaneous use of bilingual texts, e.g. do students constantly cross-reference or do they consult mainly one of the language versions?

(c) Explore whether all areas of knowledge are equally suitable for bilingual learning.

(d) Document and continue to up-date the documentation of, community language learning, bilingualism and bilingual learning in State and non-State schools in Victoria.

(e) Analyse the concept and role of bilingual teachers versus bilingual teacher aides in the major school systems.

In view of the above recommendations, it is clear that the Multilingual Project is operating at present under truly adverse conditions. Despite these conditions, the trends documented in this research report clearly indicate that the theoretical assumptions of this approach to bilingual education have an empirical application.

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APPENDIX I

DESCRIPTION OF MULTILINGUAL UNITS

Including Contents of Resource Kit/Unit Packet.

Introduction

Animal Families

Buying

Communications

Computers

Convicts in Australia

Gold: Life on the Australian Gold Fields

Libraries and You

Melbourne: The First Fifty Years

Myths of the Australian Aborigines

Traffic Accidents

MULTILINGUAL PROJECT

SCHOOL OF EDUCATION
LA TROBE UNIVERSITY

DESCRIPTION OF MULTILINGUAL UNITS

The Units listed below have been especially developed for students who know a language other than English. Parallel versions, matching page by page, are available in English, Arabic, Croatian, Greek, Italian, Serbian, Spanish and Turkish. Some units are also available in Vietnamese and Chinese (Mandarin/ Cantonese). Translation of the remaining units is in progress.

Each Unit is self-contained and is suitable for independent, small group, or general class work. The Units consist of illustrated booklets with self-correction guides, and resource material in a Unit Packet.

Although the Units were developed for use in Secondary Schools, some of them may be suitable for upper primary students. Teachers are advised to judge t suitability of Units for their own students on the basis of sample copies in English which are available on request.

Titles Available:

Animal Families
Buying
Communications
Computers
Convicts in Australia: A Tapescript
Gold: Life on the Australian Gold Fields
Libraries and You
Melbourne: The First Fifty Years
Australian Aborigines
Traffic Accidents

DESCRIPTION OF MULTILINGUAL UNITS

ANIMAL FAMILIES

This Unit gives students an introduction to the basic functions and concepts of family life through a study of animal behaviour. Included among the animals investigated are the salmon, sea horse, platypus, kangaroo, penguin, and monkey.

The concepts of reproduction and parental responsibility are examined through a sequential study from the lower orders to the primates. The theme developed through the Unit is that responsibilities and rewards increase as evolution progresses.

The Unit is suitable for use in a General Studies program. It can also be used in a science program.

This Unit has also been produced on tape and is available in English and the nine ethnic languages.

The Unit Packet includes colour slides, games, puzzles, and photographs.

SUGGESTED AGE - 11-14 years

Text Book - pp. 61
Tapes - 2 Cassettes
Resource Kit - 16 Items

Teachers' Notes - pp. 6
Pre- and Post-Tests - pp. 10

ANIMAL FAMILIES

CONTENT OF RESOURCE KIT/UNIT PACKET

1 Colour slides of Salmon and Sea Horses

2 Colour slides of Australian Mammals

3 Colour slides of Birds

4 Colour slides of Insects

5 Colour slides of Monkeys and Apes

6 "The Hare as Nurse to the Bear Cubs". (A story)

7 Cartoon

8 Instructions for making an Ant Jar

9 Puzzle: Find the Hidden Fishes

10 Puzzle: Decide the Difference

11 Maze: Find a path for the bird to its nest

12 Maze: Find a road for the squirrels to their hoard of nuts

13 "Mrs. Hoyt and Toto". (A true story)

14 Set of photographs for display

15 Set of photographs of monkeys and apes

16 "How to draw animals". (A set of drawings)

DESCRIPTION OF MULTILINGUAL UNITS

BUYING

This Unit intends to inform students on attitudes and practices which could influence their choice as buyers. It aims to assist them to develop ways of managing their personal and financial resources.

Students are encouraged to compare prices of consumer goods, to distinguish between needs and wants, and to become aware of the general principles of hire purchase and saving. The unit adopts an enquiry approach; it includes activities which stimulate the students to explore the motivations and values upon which their consumer behaviour is based.

The Unit is suitable for General Studies or Commercial Studies programs.

The Unit Packet consists of a game and two activities.

SUGGESTED AGE - 10-11 years

Text Book - pp. 47
Work Book - pp. 21
Resource Kit - 6 Items

Pre- and Post-Tests - pp. 10

BUYING

CONTENTS OF RESOURCE KIT/UNIT PACKET

1 The Buying Game

2 Instructions for the Buying Game

3 Die

4 Counters

5 Lucky Dip Cards

6 Sets of Simulated Bank Notes

7 Menu Plan and Exercise

DESCRIPTION OF MULTILINGUAL UNITS

COMMUNICATIONS

This Unit provides a wide variety of communication experience. Some of the aspects dealt with are communication by sign and graphics, the role of gesture and facial expression, and the use of voice tones to give added meaning in speech. There are many activities designed to increase awareness of communication: for example, watching TV without sound to see how vital words and music are to the total meaning. Another activity asks students to design their own codes.

The Unit has been written in such a way as to include many possibilities for interaction with others. For this reason, it would be most valuable if material in the Unit could be used as the basis for group discussion. Questions and activities draw on the student's own experience and are often open-ended. The correction guide on occasion gives several alternative answers to questions. In some cases, "answers" are examples given by other children, which are included for comparison.

This Unit has also been produced on tape and is available in English and the nine ethnic languages.

The Unit Packet includes photographs, a tape with several pieces of music, two braille sheets, and a copy of the Flag Code used in international shipping.

SUGGESTED AGE - 11-14 years

Text Book - pp. 59
Work Book - pp. 13
Tapes - 1 Cassette

Resource Kit - 14 Items
Teachers' Notes - pp. 3
Pre- and Post-Tests - pp. 14

COMMUNICATIONS

CONTENTS OF RESOURCE KIT/UNIT PACKET

1 Two pieces of music on tape both from: The Grand Canyon Suite, by Ferde Grofe

"Sunrise" "On the Trail"

2 A sheet of six faces

3 A sheet of four traffic signs

4 A sheet showing a Morse Code message

5 A sheet with an extract from "I Can Jump Puddles, by Alan Marshall

6 A sheet with a cartoon

7 A set of 8 photographs showing different kinds of communication

    1 a mask
    2 a painting of a stormy sky
    3 a baby crying
    4 boys watching a football match
    5 a snow scene
    6 men at a horse sale
    7 a mother and child in the sea
    8 two cats

8 Two braille sheets, one with the braille alphabet in its ordinary and simplified forms, the other showing a T intersection.

9 A card showing the International Code of Signals

10 A set of 5 photographs showing people communicating by gesture:

    1 a boy with his finger to his lips
    2 two men talking
    3 men hostile at a meeting
    4 two children fighting
    5 men cheering at a meeting

11 A sheet of photos showing different bodily positions for a particular sport or activity

12 A tape with different kinds of drum music

    1 African drums
    2 dance band drums
    3 dance band drums
    4 marching drums

13 A set of 6 picture cards to be arranged in sequence by the children

DESCRIPTION OF MULTILINGUAL UNITS

COMPUTERS

This Unit introduces the student to the world of the computer. It relates the apparent complexity of the computer to the everyday life of students, highlighting the fact that the machine is not so much a mechanical brain as an instrument of calculation.

The history of mechanical calculation is traced through the use of tied knots, tally marks, sand trays and the abacus and attention is focused on the technological and sociological background which gave rise to the invention of the computer. Interwoven with this conceptual background are various mathematical functions required to be performed by the student. These are of a simple nature.

The constituent parts of the computer are examined with stress placed on the movement of data between these parts so that no one part is seen in isolation. The basic principles of digital arithmetic are introduced and compared with the notion of decimal arithmetic.

The Unit begins and ends with considerations of the possible place of the computer in the lives of growing students. Its uses in the home and in various disciplines, both scientific and sociological, are considered.

The booklet contains illustrations which elucidate the text. The Unit Packet contains photographs, games, punch cards, a print out sheet and a pocket calculator.

SUGGESTED AGE - 11-14 years

Text Book - pp. 60
Resource Kit - 12 Items
Teachers' Notes - pp. 4
Pre- and Post-Tests - pp. 10

COMPUTERS

CONTENTS OF RESOURCE KIT/UNIT PACKET

1 Photograph
Input Keyboard Machine
2 Photographs
Keyboard of Input Machine
Keyboard of Typewriter
3 Photograph
Batch of cards being fed into Card Reader
4 Two Punch Cards
One punched, one unpunched
5 Photograph
Woman operating a Key Punch
6 Two pieces of Tape
One punched, one unpunched
7 Photograph
Two Disks
8 Photograph
Printout Machine
9 Printout Paper
Sample Sheet
10 Photograph
Visual Display Unit
11 Puzzle
Duplicated Sheet
12 Pocket Calculator

MULTILINGUAL PROJECT
SCHOOL OF EDUCATION
LA TROBE UNIVERSITY

DESCRIPTION OF MULTILINGUAL UNITS

CONVICTS IN AUSTRALIA

This unit is about the people who were transported to Australia when it was a penal colony. It features colonial music, dramatic sketches, and extracts from letters and diaries. These are all used to depict the 'human dimension' of this period in history.

The presentation is an oral one concentrating on the spoken language. The tape provides all the necessary information so that reading skills are not required. This allows students of various degrees of literacy to learn about historical events. However, a tapescript is provided for students who wish to listen and at the same time follow the printed text.

Dramatization techniques are used on the tape. Some of the suggested activities for small group work are exercises in dramatization and miming. None of the exercises requires literacy skills.

The unit kit contains various types of illustrations which are designed to stimulate classroom discussion and generally to enrich the students' understanding of the place of the convict in Australian history.

This unit could form the first part of an historical sequence using the Multilingual Project units 'Gold: Life on the Australian gold fields', and 'Melbourne: the first fifty years.'

SUGGESTED AGE - 10-13 years

Cassette Tape *Resource kit - 5 items*
Tapescript - pp. 39

CONVICTS

CONTENTS OF RESOURCE KIT/UNIT PACKET

1. Set of 6 photographs or prints
2. Set of 3 illustrations
3. Cassette tape: Convict songs
4. Game

MULTILINGUAL PROJECT

SCHOOL OF EDUCATION
LA TROBE UNIVERSITY

DESCRIPTION OF MULTILINGUAL UNITS

GOLD: LIFE ON THE AUSTRALIAN GOLD FIELDS

This Unit concentrates on the gold rush period in Victoria. There is a broad chronological framework which begins with the tiny pre-gold rush settlement of Melbourne, traces the impact of gold discovery on the colony, and finishes with information about towns, buildings and practices which have their origins in the gold rush era.

The effect of the gold discoveries on everyday living are discussed. For example, the location of the gold fields is depicted in terms of the distances which people had to travel, and the hardships suffered by many of the gold seekers. The emphasis is on life on the gold fields and the methods and difficulties of obtaining gold.

Although Ballarat has been looked at in detail, life was similar on all the gold fields. The Unit ends with a brief look at the present state of gold mining and the many reminders of the gold rush period that can still be seen today.

The Unit suggests the continuity of past and present. Thus, the influx of immigrants from many countries during the gold rush era has its parallel in post-war immigration.

This Unit has also been produced on tape and is available in English and the nine ethnic languages.

The Unit Packet includes slides, stories, illustrations and a game.

Suggested age - 11 - 14 years

Text Book - pp. 61
Resource Kit - 15 Items
Teachers' Notes - pp. 6
Pre- and Post-Tests - pp. 10

GOLD

CONTENTS OF UNIT PACKET

1. Story 'The Discovery of the Welcome Stranger'.

2. Story 'Gold Rush in Melbourne'.

3. Picture - A tent where coffee was sold to men on their way to the gold fields.

4. Picture - A group of people who have just arrived at the gold fields.

5. Picture - Setting for a television series about the gold rushes.

6a. Picture - A miner uses a shovel in a tub of earth and gravel.

6b. Picture - Two miners work with a cradle beside a stream.

6c. Picture - A successful miner shows the gold in his dish.

7. Set of six slides:

   Slide 1: A horse-powered mill crushing rock.
   Slide 2: A reconstruction of the main street of Ballarat in the 1850's.
   Slide 3: The city of Ballarat in 1976.
   Slide 4: Looking for gold at Sovereign Hill.
   Slide 5: The Eureka Memorial, Ballarat.
   Slide 6: The Chinese dragon at the Bendigo Easter Parade.

8. Picture - A storekeeper weighs some gold.

9. Making a beam balance.

10. Picture - Gold arriving at the mint in Melbourne.

11. Story 'A Daring robbery During the Gold Rushes'.

12. Pictures - Four ways diggers spent their money.

13a. Copy of Gold Licence.

13b. Copy of a Miner's Right.

13c. A modern Miner's Right.

14. Picture - Diggers queuing for Gold Licences.

15. Play the Gold Rush Game.

16. A set of 5 display posters.

DESCRIPTION OF MULTILINGUAL UNITS

LIBRARIES AND YOU

This Unit teaches the basic skills needed to use a library. Matters dealt with include facility with the English alphabet, familiarisation with library organisation, cataloguing, shelving and the Dewey classification system. The Unit also contains information about the foreign language collections of libraries in the Melbourne area. The Unit aims to make books accessible to students in two ways:

1. by familiarisation with the organisation and layout of a public library, it is hoped they will feel that the library is a place where they can confidently go and borrow or browse and ask questions.

2. by providing a knowledge of book classification and cataloguing which should make it possible for students to use their school and local libraries to find books for school use, hobbies or recreational reading.

The value of the Unit would be greatly enhanced by students having access to a library. There is provision for participation by a Librarian.

The Unit Packet consists of a game to give students practice in the shelf arrangement of books in a library.

SUGGESTED AGE - 10-14 years

Text Book - pp. 33	*Resource Kit - 11 Items*
Work Book - pp. 10	*Pre- and Post-Tests - pp. 6*

LIBRARIES AND YOU

CONTENTS OF RESOURCE KIT/UNIT PACKET

1 *Shelf Game Consisting of 10 Sets of Cards and Holders*

2 *Instructions for Game*

MULTILINGUAL PROJECT
SCHOOL OF EDUCATION
LA TROBE UNIVERSITY

DESCRIPTION OF MULTILINGUAL UNITS

MELBOURNE: THE FIRST FIFTY YEARS

This Unit gives a brief historical account of the foundation and development of the city of Melbourne, from the discovery of Port Phillip Bay to the Great Exhibition in 1880. While summarising the historical events which led to the rapid growth of Melbourne, it also indicates conditions necessary for the development of any city.

As well as providing background information which should be of interest to migrant students and their families, the Unit also raises social issues such as adjustment of immigrants to life in a new land, and the effects of white settlement on the Aborigines.

The booklet contains many illustrations which have been adapted from historical sketches and prints. This Unit has also been produced on tape and is available in English and the nine ethnic languages.

Additional material in the Unit Packet includes colour slides, wall charts, photographs, facsimiles of documents, puzzles and activities.

SUGGESTED AGE - 11-14 years

Text Book - pp. 50
Tapes - 1 Cassette
Resource Kit - 18 Items
Teachers' Notes - pp. 3
Pre- and Post-Tests - pp. 10

MELBOURNE: THE FIRST FIFTY YEARS

CONTENTS OF RESOURCE KIT/UNIT PACKET

1 Maze - A Walled City

2 Classroom Chart of Australian exploration to 1788

3 Puzzle - Save the Ship

4 Copy of Batman's Treaty

5 Maze - A Badly Planned Town

6 Copy of Melbourne Advertiser, 1838

7 A story in pictures

8 Classroom chart - City of Melbourne

9 Newsletter from Australia

10 Colour slides: The Aborigines

11 Classroom chart - Aborigines

12 Study prints - Early Australian Road Transport

13 Study prints - Sandridge, Then and Now

14 Classroom charts (2) - Prints of Early Melbourne

15 Colour slides: Early Prints of Melbourne

16 Classroom pictures (3) - Melbourne Buildings

17 Colour slides: Victorian Social Life, 19th Century

18 Photograph - Melbourne Today

MULTILINGUAL PROJECT

SCHOOL OF EDUCATION
LA TROBE UNIVERSITY

DESCRIPTION OF MULTILINGUAL UNITS

MYTHS OF THE AUSTRALIAN ABORIGINES

In this Unit, attention is focused on the life style and cultural patterns of Aborigines. Students are made familiar with particular myths which reflect Aboriginal thinking about housing, clothing, possessions, religion and books. The connection between a nomadic existence and the geographic features which determine it are given some consideration.

From its study of Aborigines, the Unit extends into a reflection on the entry of Europeans into the Aboriginal setting, and opens the way for an examination of the multicultural nation that is Australia.

In practical terms, students are challenged to develop map drawing and map reading skills and are encouraged to participate in a variety of self-learning exercises ranging from answering simple but significant questions to producing a profile of the Aborigines.

The Unit Packet comprises a set of photographs carefully selected to stimulate discussion and meaningful interpretation.

SUGGESTED AGE - 11-13 years

Text Book - pp. 50
Resource Kit - 1 set of photographs
Pre- and Post-tests - pp. 10

MYTHS OF THE AUSTRALIAN ABORIGINES

CONTENTS OF RESOURCE KIT/UNIT PACKET

1 *Set of 18 photographs*

MULTILINGUAL PROJECT
SCHOOL OF EDUCATION
LA TROBE UNIVERSITY

DESCRIPTION OF MULTILINGUAL UNITS

TRAFFIC ACCIDENTS

This Unit alerts students to the death toll on our roads, discusses possible causes of accidents, gives information on obtaining driving licences, discusses safety in vehicles and advises on procedures to be taken in the event of a traffic accident.

The primary emphasis has been to develop understanding and appreciation of the dangers of traffic in our society, in the hope of fostering responsible attitudes and knowledge in the individual. The opportunity is given to learn such skills as reading and interpreting graphs and tables. The Unit is suitable for General Studies programs.

The Unit Packet contains photographs of traffic accidents, advertisements for cars, and a game with a number of traffic situations.

SUGGESTED AGE - 12-15 years

Text Book - pp. 40
Work Book - pp. 20

Resource Kit - 3 Items
Pre- and Post-Tests - pp. 14

TRAFFIC ACCIDENTS

CONTENTS OF RESOURCE KIT/UNIT PACKET

1	Game - Rules of Good Driving
2	Instructions for Game
3	Die
4	Counters
5	Set of 7 Photographs

APPENDIX 2

EVALUATION INSTRUMENTS

Examples of Pre- and Post-tests

Teachers' Questionnaire (TQ)

Teachers' Interview Schedule (TI)

Students' Questionnaire (SQ)

Students' Interview Schedule (SI)

Parents' Questionnaire (PQ)

Unit Evaluation Questionnaire (UEQ)

MULTILINGUAL PROJECT

MELBOURNE

UNIT TEST P

---

1. Explorers from different countries discovered parts of Australia.

   Which group of people did NOT discover any part of it?

   A Dutch
   B Spanish
   C American
   D British

2. The first people to live in Australia were the

   A Dutch.
   B British.
   C Chinese.
   D Aborigines.

3. Most of the first Europeans to live in Australia were

   A convicts.
   B soldiers.
   C farmers.
   D traders.

4. The first European settlers in Australia lived in

   A Queensland.
   B Victoria.
   C New South Wales.
   D South Australia.

5. Which of these statements is correct?

   A Aborigines once lived where the city of Melbourne now stands.

   B Aborigines built cities in Australia before the arrival of white people.

   C White people built cities in Australia before the arrival of the aborigines.

   D White people took the city of Melbourne away from the aborigines.

6. Before the arrival of Europeans, Australian aborigines lived by

   A hunting and fishing.

   B farming and breeding cattle.

   C manufacturing and trading.

   D buying and selling land.

7. A corroboree is

   A a type of spear.

   B a musical instrument.

   C a war council.

   D a festival dance.

8. Which of these cities was most recently established?

   A Athens

   B Melbourne

   C Rome

   D Istanbul

9. Flinders Street is named after Matthew Flinders. He was

A a Prime Minister.

B a Governor.

C a solider.

D an explorer.

10. Melbourne began as a small settlement on a river. The name of this river is

A Moomba.

B Sorrento.

C Yarra.

D Tullamarine.

11. John Batman obtained land in Victoria from the aborigines by

A fighting them.

B killing them.

C signing a treaty with them.

D giving them land in Tasmania.

12. The name of John Batman is associated with Melbourne because he

A built Batman Avenue.

B discovered gold near there.

C chose the name for the town.

D chose the site for the town.

13. Which of these statements is correct? A squatter was

A an aborigine who lived near the Yarra River.
B someone who settled on land without government approval.
C a shopkeeper in Melbourne.
D someone who lived in a tent.

14. The largest city in Australia is

A Canberra.
B Melbourne.
C Sydney.
D Adelaide.

15. When the city of Melbourne was first planned, it was designed

A in square blocks.
B around a city square.
C as a walled city.
D around a central park.

16. The first houses in Melbourne were built from

A timber and corrugated iron.
B reinforced concrete and glass.
C bricks and glass.
D. mud and timber.

17. Government-sponsored migration to Melbourne began in

A 1665.

B 1840.

C 1918.

D 1946.

18. The state of Victoria was named after

A the Queen of Holland.

B John Batman's wife.

C the Queen of England.

D Captain Cook's wife.

19. In 1852, the discovery of gold in Victoria brought rapid changes to Melbourne. Which of the following did NOT occur at that time?

A Money became available for road making, street lighting and water supply.

B Thousands of people came to Melbourne.

C Public buildings such as a Library, Museum and University were built.

D An airport was constructed.

20. The Exhibition Buildings, in Carlton, were specially built in 1880 for

A an international exhibition.

B an examination centre.

C a motor show.

D a homes exhibition.

MULTILINGUAL PROJECT

MELBOURNE

UNIT TEST T

---

1. Explorers from several European countries discovered Australia. Which nation colonized it?

   A Holland

   B Spain

   C Britain

   D Portugal

2. When the British discovered Australia, the people they found already living there were

   A Spanish.

   B Chinese.

   C Aborigines.

   D Indian.

3. Originally, the British were mainly interested in Australia as a

   A convict colony.

   B farming settlement.

   C trading post.

   D whaling station.

4. Which of these animals was brought to Australia by Europeans?

   A the koala

   B the rabbit

   C the kangaroo

   D the platypus

5. Before white men discovered Australia, the aborigines lived by

   A growing crops.

   B hunting and fishing.

   C breeding sheep.

   D selling boomerangs.

6. A mia-mia is

   A a type of dress made from fur and feathers.

   B a stone weapon used for hunting.

   C a native animal used for tracking.

   D a type of shelter made from branches of trees.

7. About how long ago was Melbourne first established?

   A 50 years

   B 150 years

   C 500 years

   D 1,000 years

8. Which of these statements is correct?

   A John Batman gave tomahawks, knives and other things to the aborigines in exchange for land.

   B John Batman found a city, built by aborigines, near the Yarra River.

   C Aborigines found cities in Australia, built by white people, when they first came here.

   D Aborigines bought land in Australia from John Batman.

9. Bass Strait is named after George Bass. He was

   A a Governor.

   B a soldier.

   C a Prime Minister.

   D an explorer.

10. Which of these men did NOT take part in the development of the city of Melbourne?

    A Charles La Trobe

    B Richard Bourke

    C James Cook

    D John Batman

11. "This will be the place for a village." Who said this when he arrived at the place where the city of Melbourne now stands?

    A Captain Cook

    B John Batman

    C Matthew Flinders

    D an aborigine

12. The place selected for the city of Melbourne was suitable because

A there were many wild animals.

B there was fresh water.

C the aborigines liked it.

D it was so pretty.

13. Most of the early settlers who migrated to Victoria became

A farmers.

B fishermen.

C factory workers.

D soldiers.

14. The largest city in Australia is

A Perth.

B Canberra.

C Sydney.

D. Melbourne.

15. The name of Robert Hoddle is associated with Melbourne because he

A bought land from the aborigines.

B planned the streets for the city.

C opened the first shop in the city.

D printed the first newspaper.

16. European people who wanted to migrate to Melbourne in the 1840's could get information from

    A films.

    B television.

    C books.

    D radio.

17. Until 1850, the Port Phillip district, which included the city of Melbourne, was governed from

    A Tasmania.

    B Sydney.

    C Geelong.

    D Richmond.

18. Melbourne developed rapidly in the 1850's after the discovery of gold in Victoria. Which of these developments did NOT follow soon after the gold rushes?

    A an increase in the population of Melbourne

    B the first railway

    C an increase in wealth to pay for public buildings

    D the first freeway

19. The year 1850 was an important one for Melbourne because in that year

    A the city was built.

    B the Queen visited Melbourne.

    C Victoria became an independent colony.

    D the population reached one million.

20. When factories were built late last century in the inner suburbs of Melbourne, many people went to live further away from the city. The main reason for this was that

    A they liked travelling to work by motor car.

    B they didn't like the noise and smell from the factories.

    C they had more free time to spend in larger gardens.

    D they couldn't find jobs near the city.

LA TROBE UNIVERSITY
SCHOOL OF EDUCATION

MULTILINGUAL PROJECT

TEACHER'S QUESTIONNAIRE

INSTRUCTIONS

Please circle (e.g. ②) the appropriate number of your choice, or write the answer in the space provided.

For Office Use Only		Card 1
1	Respondent number	1/2/3
2	Questionnaire identification	4
3	Card number	5
4	Blank	6

5. School 7/8/9

6. Teacher's Name ....

7. Date: Year 19.... 8. Month 10/11/12

9. What is your native language? 13/14

10,11. Do you speak any other language(s)? (Please specify)

.... 15/16

.... 17/18

12. Are you learning any other language(s)?

Yes 1
Would like to 2
No 3 — 19

13. Do you ever explain anything to migrant students in a language other than English?

Yes 1
No 2 — 20

14. Did you take any component(s) in your teacher training course concerned with migrant education?

Yes 1
No 2 — 21

15. Have you attended any workshops/seminars etc. concerned with migrant education since your teacher training?

Yes 1
No 2 — 22

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use o

16. In your school the proportion of students who have a non-English speaking background is:

two-thirds or more 1
about half 2
one third or less 3
very few 4
don't know 5 23

The following questions refer to students using Multilingual Project materials.

17. Of the students using the project materials, the approximate proportion attending special English classes is:

two-thirds or more 1
about half 2
one third or less 3
very few 4
none 5
don't know 6 24

Please answer Questions 18, 19 and 20 if your students attend special English classes.

18. The duration of these special English classes is .... min ea. 25

19. The number of special English lessons per week is 26

20. These special English lessons are given by yourself:

Always 1
Sometimes 2
Never 3 27

21. If there are other special provisions made for these students, please specify.

....

.... 28

22-31. How many of your students are using the materials in each of these languages?

No. of Children

English only 29/
Arabic 31/
Greek 33/
Italian 35/
Turkish 37/

(list of languages continued

For office use only

No. of Children	For office use only
Croatian	39/40
Serbian	41/42
Spanish	43/44
in another language	45/46
(please specify)	47/48

32. How are the materials used in your classes?

by migrants for independent study in a classroom where other Australian students are working on something different.	1	49
by migrants alongside other Australian students who are using the same materials in English.	2	
in withdrawal classes (all ethnic groups together)	3	
by Australian students only	4	
other (please specify)	5	

33. Students in a class generally work

at the same pace	1	
at individual rates	2	
in small groups	3	
a combination of these	4	50

4-36. (Please answer A, B and C.)

Students generally use:	All Students	Some Students	No Students	
A booklets only	1	2	3	51
B tapes only	1	2	3	52
C both booklets and tapes	1	2	3	53

7-39. How are the different texts used?

	All Students	Some Students	No Students	
A Students use the English text only	1	2	3	54
B Students use the other text only	1	2	3	55
C Students use both texts	1	2	3	56

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40-48. If your students work in their native language(s). How do you handle the situation?

	Yes	No	
Students who speak the same language work together and help each other.	1	2	57.
Colleagues or interpreters help.	1	2	58
Students are helped by parents at home.	1	2	59
I follow the students' progress by means of parallel texts.	1	2	60
I allow the students to work independently.	1	2	61
I communicate with students in their native language.	1	2	62
I have not found a satisfactory way of handling this situation.	1	2	63
Other (please specify)	1	2	64
Not applicable (eg. all students work in English).	1	2	65

Your evaluation of the Project Materials.

49-52.

How much has working with the Project materials helped the student	A great deal	A little	Not at all	Don't know	N.A.	
with their English?	1	2	3	4	5	66
with learning their other language?	1	2	3	4	5	67
with learning factual material?	1	2	3	4	5	68
with taking part in lessons?	1	2	3	4	5	69

53. In your opinion, what is the main function of the units?

to help migrant children to learn and maintain their native language.	1
to extend migrant children's knowledge of English	2
to encourage them to learn in both languages	3
to provide meaningful work for migrant children who cannot understand English well enough to keep up with normal classes	4
to be used in whole classes by both Australian and migrant children, as general teaching material	5
a combination of these (specify which numbers)	6
other (specify)	7

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54. Do you think migrant students should be encouraged to use their native language when they are at school?

Yes	1	
No	2	
Don't know	3	71

55. Why? 72

56. Would you like to see bilingual education extended in your schools?

Yes	1	
No	2	
Don't know	3	73

57. Do the students enjoy working in two languages?

Yes	1	
No	2	
Don't know	3	
N.A.	4	74

58. Why? ....

.... 75

59. What age group do you think the booklets are suited to? ....

.... 76

60. Have you learnt anything else about the pupils in doing this kind of work? (Please give details)

77

61. Any other comments?

LA TROBE UNIVERSITY

SCHOOL OF EDUCATION

MULTILINGUAL PROJECT

TEACHER'S INTERVIEW SCHEDULE

For Office Use Only		
1. Respondent Number		1/2/3/
2. Questionnaire Identification		5
3. Card Number		6
4. Blank		7
5. Date: Year		8
Month		9/10

6. School.. 11/12/

7. Sex:

Male	1	
Female	2	14

8. Name ....

9. Private Address ....

....

Telephone ....

10. What subjects are you teaching?

English as a Second Language	1	
Humanities	2	
Social Sciences	3	
Physical Sciences	4	
Humanities and Social Sciences	5	
Humanities and Physical Sciences	6	
Social and Physical Sciences	7	
English as a Second Language and another	8	
Other	9	15

11. How many years have you been teaching?

Up to 1 year	1	
Up to 2 years	2	
Up to 4 years	3	
UP to 10 years	4	
Over 10 years	5	16

Office
Only

12. Are you primary or secondary trained?

Primary	1	
Secondary	2	
Both	3	
Neither	4	1

13. In which country were you born?

Australia	1	
United Kingdom	2	
Europe	3	
North America	4	
South America	5	
Asia	6	
South Pacific	7	
Africa	8	
Other	9	1

14. What is your native language? 19/2

15. Do you speak any other languages? (please specify)

.... 21/2

.... 23/24

.... 25/2

16. Are you studying a migrant language?

Yes	1	
No	2	
Previously	3	
Definitely intend to	4	
Would like to	5	27

17. Which one? 28/29

18. Has the work with the Project expanded your knowledge of languages?

A great deal	1	
A little	2	
Not at all	3	
Don't know	4	30

19. How long have you been using the Project units?

Up to and including 1 month	1	
Up to and including 1 term	2	
Up to and including 1 year	3	
Up to and including 2 years	4	
Longer	5	3

Office us
Only

For Questions 20 and 21, for part (a) tick as many responses as the teacher gives. Circle only one for part (b).

20. (a) How did you know about the Project?

(b) Which source of information was the most important?

Read about it	1	
Inspected it at Conference(s)	2	
Heard about it in in-service training	3	
Heard about it in teacher education, first degree	4	
Heard about it in teacher education, B.Ed.	5	
Heard about it from principal/colleagues, present school	6	
Heard about it from principal/colleagues, other schools	7	
Can't tell	8	
Other	9	32

21. (a) Why did you take part?

(b) Which consideration was the most important?

to teach English	01	
to teach language(s)	02	
to teach both	03	
Students can work at own intellectual level	04	
to give new arrivals work they can cope with	05	
Prompted by principal/colleagues	06	
Already established in school	07	
the Project provided useful teaching materials	08	
Other	09	
Can't tell	10	33/34

22. In your opinion, how did this work affect the students' English?

Marked Improvement	1	
Slight Improvement	2	
No Improvement	3	
Made it worse	4	
Don't know	5	
N/A	6	35

23. How did this work affect the students' native language?

Marked Improvement	1	
Slight Improvement	2	
No Improvement	3	
Made it worse	4	
Don't know	5	
N/A	6	36

24. Have these units affected student attitudes to learning?

Marked Improvement	1	
Slight Improvement	2	
No Improvement	3	
Made it worse	4	
Don't know	5	
N/A	6	37

25. Do the units give suitable and sufficient factual information?

Yes	1
No	2
Don't know	3

38

26. Which do you think is the more important outcome, a gain in factual information, or a change in attitude to learning?

Information	1
Attitude	2
Both	3
Can't tell	4

9

27-31. At the outset, what did you expect from the Project? Did these things come about?

27. Expectation...

....

28.

Yes	1
No	2
Don't know	3

29. Expectation...

.... 42

30.

Yes	1
No	2
Don't know	3

43

31. Comment...

32. Were there unforseen effects resulting from this work?

Yes	1
No	2
Don't know	3

33. What were they?..

....

34. Which units have you used?

01	Animal families	05	Convicts	09	Myths
02	Buying	06	Gold	10	Traffic
03	Communications	07	Libraries	11	Wool
04	Computers	08	Melbourne	12	Other

Total number of units used...........

Take up to three units and consider them separately.

225

35. Unit 1. .... 48/49

				Office Only
36.	Would you use it again?	Yes	1	
		No	2	
		Don't know	3	50
37.	Did you think it was satisfactory?			
		Very satisfactory	1	
		Fairly satisfactory	2	
		Unsatisfactory	3	51
38.	Comments..			
	....			52
39.	Unit 2..			53/54
40.	Would you use it again?	Yes	1	
		No	2	
		Don't know	3	55
41.	Did you think it was satisfactory?			
		Very satisfactory	1	
		Fairly satisfactory	2	
		Unsatisfactory	3	56
42.	Comments..			
	....			57
43.	Unit 3..			58/59
44.	Would you use it again?	Yes	1	
		No	2	
		Don't know	3	60
45.	Did you think it was satisfactory?			
		Very satisfactory	1	
		Fairly satisfactory	2	
		Unsatisfactory	3	61
46.	Comments..			
	....			62

The Project in general

47. (a) Would you recommend the Project to others? To whom?

(b) For whom do you think it is the most valuable?

TESL teachers	1	
Teachers of migrant languages	2	
Secondary teachers generally	3	
Primary teachers	4	
Migrant students only	5	
Australian students	6	
Other	7	
Some or all of these (specify)		
....	8	
Don't know	9	63

Offic
Only

48. Do you intend to use other units?

Yes	1	
No	2	
Undecided	3	64

49. Have you learnt anything now about the pupils in doing this kind of work? (Please give details).

....

.... 65

50. How did the Australian students react to the introduction of these materials into your school?

Favourably	1	
Neutral	2	
Unfavourably	3	
They don't know about it	4	66

51. If your pupils work in a language you don't understand, which way of handling the situation have you found most effective?

Parallel text	1	
Peers	2	
Cross-age help	3	
Colleagues	4	
Student's family	5	
Other persons	6	
Some or all of these (specify)		
....	7	
Other	8	67

52. (a) Could you specify the skills needed most by the teachers using the Multilingual Project materials?

Ability to organize independent/small group study	1	
Ability to enrich assignment work with non-verbal activities	2	
Ability to understand migrant children	3	
Being informed about migrant groups	4	
Linguistics	5	
Knowing the students' native language	6	
Other	7	
Some or all of these (specify)		
....	8	
Don't know	9	6

52. (b) In your opinion, which skill is most effective?

Ability to organize independent/small group study	1	
Ability to enrich assignment work with non-verbal activities	2	
Ability to understand migrant children	3	
Being informed about migrant groups	4	
Linguistics	5	
Knowing the students' native language	6	
Other	7	
Some or all of these (specify)	8	
Don't know	9	69

53. The following might be useful ways for teachers to acquire these abilities. Which do you think would be the most effective?

Experience with migrant children in the classroom	1	
Observation of colleagues	2	
Interaction with migrant communities	3	
Training	4	
Reading	5	
Migrant language learning	6	
Other	7	
Some or all of these	8	
Don't know	9	70

54. How have migrant parents reacted to the Project?

Favourably	1	
Unfavourably	2	
Not at all	3	
Not informed	4	
Can't tell	5	71

55. How has the staff reacted?

Favourably	1	
Unfavourably	2	
Not at all	3	
Not informed	4	
Don't know	5	72

56. How has the principal reacted?

Favourably	1	
Unfavourably	2	
Not at all	3	
Not informed	4	
Can't tell	5	73

57. How have these reactions affected the Project?

....

....

58. Have other teachers looked at the materials?

Yes	1
No	2
Don't know	3

59. Any incidents you would like to describe?

....

....

60. Any other comments you would like to make?

....

....

LA TROBE UNIVERSITY

SCHOOL OF EDUCATION

MULTILINGUAL PROJECT
STUDENT'S QUESTIONNAIRE

INSTRUCTIONS

Please circle (e.g.②) the appropriate number of your choice, or write the answer in the space provided.

For Office Use Only

1	Respondent number	1/2/3/4
2	Identification of Questionnaire (3)	5
3	Card Number	6
4	Language of Questionnaire	7/8
5	Date: Year (197)	9
6	Month	10/11

7. School 12/13/14

8. Grade.........................or Form 15/16

9. Name ....

10. Sex
    Male 1
    Female 2 17

11. Date of birth 18/19

12. In what country was your father born? 20/21

13. In what country was your mother born? 22/23

14. What is your father's native language? 24/25

15. What is your mother's native language? 26/27

16. In what country were you born? 28/29

17. How many years have you lived in Australia? 30/31

18. What language(s) do you speak? 32/33
    .... 34/35
    .... 36/37

19. Which language did you speak first? 38/39

20. Which language do you know better?
    English 1
    Your other language 2
    No difference 3 40

Circle one of the numbers (1,2,3 or 4) to indicate how well you can read and write each language.

		Very well	Adequately	Not very well	Not at all	Offi Use Only
21.	Can you read English?	1	2	3	4	41
22.	Can you read your other language?	1	2	3	4	42
23.	Can you write English?	1	2	3	4	43
24	Can you write your other language?	1	2	3	4	44

25. Are you interested in studying your native language?

Very interested	1	
Moderately interested	2	
Not interested	3	
(If the only language spoken in your family is English, circle 4).	4	45

26. Are you studying your native language now?

Yes, at this school	1	
Yes, at another school	2	
Yes, at home or with friends	3	
No	4	
(If your native language is English, circle 5)	5	46

27. Are you learning another language apart from English and your native language?

Yes, at this school	1	
Yes, at another school	2	
Yes, at home or with friends	3	
No	4	47

28. Which language is it? 48/4

Use
Onl

Circle one of the numbers, to indicate which language you use when you are speaking with your family and friends. Please answer all the questions.

	Only English	Mostly English	Mostly another language	Only another language	Not applicable	
29. In what language does your father speak to you?	1	2	3	4	5	50
30. In what language does your mother speak to you?	1	2	3	4	5	51
31-35. In what language do you speak:						
- to your father?	1	2	3	4	5	52
- to your mother?	1	2	3	4	5	53
- to your brothers and sisters?	1	2	3	4	5	54
- to your relatives and friends of your parents?	1	2	3	4	5	55
- to friends at school?	1	2	3	4	5	56
36. In what language do you read:						
- books?	1	2	3	4	5	57
- newspapers and magazines?	1	2	3	4	5	58

The rest of the questions refer to the Multilingual Project study units, e.g. Animal Families, Melbourne: the First Fifty Years, Communications, Buying, Myths of the Australian Aborigines, and others. You may have been working with booklets, tapes or both.

37. How many of the study units have you used? 59

38. Did you work in both languages when you were using the study units?

Only used the English text	1	
Only used the text in my other language	2	
Always used both texts	3	
Usually worked in one language only but occasionally used the other	4	60

Offi
Use
Only

39. Why?		61
....		

40. Which do you think is more important?

learning in two languages	1	
learning in English only	2	
don't know	3	62

41. Which would you rather do?

learn in two languages	1	
learn in English only	2	
don't know	3	63

	Yes	No	Don't Know	
42. Did you enjoy working with the units?	1	2	3	64
43. Is it difficult to learn from booklets (or tapes) like these?	1	2	3	65
44. Did you learn many new things from these units?	1	2	3	66
45. Did working with them help you to take part in lessons?	1	2	3	67
46. Has anybody at home seen these units?	1	2	3	68
47. Did other members of your family help you with them?	1	2	3	69

48. Did working with these study units help you: (circle one number only)

- with your English?	1	
- with your native language?	2	
- with both languages?	3	
- not much with either language?	4	70

49. How important is your native language to you since you have been using these units?

- more important than before	1
- no change	2
- less important than before	3

		Office Use Only
50. Would you like the English texts to be		
- Easier?	1	
- About the same?	2	
- Harder?	3	
- (If you did not use the English, circle 4)	4	72
51. Would you like the other language texts to be		
- Easier?	1	
- About the same?	2	
- Harder?	3	
- (If you did not use other language texts, circle 4)	4	73
52. Did you use the unit packets?		
- Yes, all the time	1	
- Yes, sometimes	2	
- No, never	3	74
53. What is the name of the last study unit you have used?		
....		75/76
54. Did you like that unit? Yes 1 No 2 Don't know 3		77
55. What else would you like to say?..		
....		
....		78

Thank you for your help.

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MULTILINGUAL PROJECT

STUDENT'S INTERVIEW SCHEDULE

The items in brackets are intended as a guide for processing the information. They are not intended to form part of the questions.

Please begin
by stating the language
and date of the interview.

For Office Use Only

1.	Respondent Number		1/2/3/4
2.	Questionnaire Idenfication		5
3.	Card Number		6
4.	Blank		7
5.	Language		8/9
6.	Date: Year		10
	Month		11/12
7.	School		13/14/15
8.	Grade or Form		16/17
9.	Could you tell me your name?		
10.	How long have you been in Australia?		18
11.	Sex: Boy 1 Girl 2		19
12.	What languages do you speak?		20/21
	....		22/23
	....		24/25

For
Us

13.	How do you feel about speaking more than one language ?	Like it	1	
		Don't like it	2	26
		Don't know	3	
14.	Why?	Useful for job	1	
		Travel	2	
	- What are the advantages of speaking other languages?	Family	3	
		Friends	4	
		Understanding others	5	
		Interested in languages in general	6	
		Other	7	
		Don't know	8	
15.	Can you read X?	Well	1	
		A little	2	
		Not at all	3	
16.	Can you write X?	Well	1	
		A little	2	29
		Not at all	3	
17.	Where did you learn to read and write it?	In country of origin	1	
		In Australia	2	
		Both	3	30
		N.A.	4	
18.	Are you studying X now? Where?	At this school	1	
		At another school	2	
		At home or with friends	3	31
		Not studying	4	
19.	Can you read English?	Well	1	
		A little	2	
		Not at all	3	
20.	Can you write it?	Well	1	
		A little	2	33
		Not at all	3	
21.	Did you learn any English in your other country? (specify)	Much	1	
		A little	2	
		None	3	34
		N.A.	4	
22.	Which language do you find easier to speak, English or X?	English	1	
		X	2	35
		No difference	3	

				For Offi Use Onl
23.	Which language do you find easier to read and write English or X?	English	1	
		X	2	
		No difference	3	36
24.	Why?			37
25.	Have you been using any of the Multilingual Project Units? Which one?	Animal Families	01	
		Communications	02	
		Myths	03	
		Traffic Accidents	04	
		Libraries	05	
		Melbourne	06	
		Buying	07	
		None	08	38/39
		Other		
26.	Did you use the text in English, in X or in both languages?	English	1	
		X	2	
		Both	3	40
27.	Why?			41
28.	How do you feel about learning both in X and in English?	Like it	1	
		Don't like it	2	
		Don't know	3	42
		N.A.	4	
29.	Why?			43
30.	(For those who used both the texts only). When you were working with the unit, did you usually look at the English or the X first?	English	1	
		X	2	
		Varies	3	
		N.A.	4	44
31.	Did you learn any new English words from the unit? How many?	Many	1	
		Some	2	
		Hardly any	3	
		N.A.	4	45
32.	What about new sentences (groups of words, expressions) in English? Did you learn many of them?	Many	1	
		Some	2	
		Hardly any	3	
		N.A.	4	46
33.	How many new words did you learn from the unit in X?	Many	1	
		Some	2	
		Hardly any	3	
		N.A.	4	47

				For O Use
34.	How many new sentences (groups of words, expressions) did you learn in X?	Many	1	
		Some	2	
		Hardly any	3	
		N.A.	4	48
35.	Have you learnt about any new things you did not know before? How many?	Many	1	
		Some	2	
		Hardly any	3	49
36.	Did you use the texts on your own, or did you work with other students/children?	Own	1	
		Other	2	
		Varies	3	50
37.	Did your teacher (mention name) help you?	Always	1	
		Sometimes	2	
		Never	3	51
38.	How did he/she help you? What did he/she do?			52
39.	Did anybody else help you? Who?	Members of the family	1	
		Friends	2	
		Other teachers	3	
		All of these apply	4	
		Nobody else	5	53
40.	How did they help you?			54
41.	Was the unit easier or harder than the other work you do at school?	Easier	1	
		Harder	2	
		No difference	3	55
42.	Do you like it more or less?	More	1	
		Less	2	
		Same	3	56
43.	Would you like to learn about other things this way, learn in X and in English?	Yes	1	
		No	2	
		Don't know	3	
		N.A.	4	57
44.	Do you think that other children/ students who know two languages like you, would be interested to learn from these booklets?	Yes	1	
		No	2	
		Don't know	3	
		N.A.	4	58
45.	Why?			59

				For Office Use Only
6.	Are you going back to X (give country of origin), or will you stay in Australia?	Stay	1	
		Return	2	
		Visit	3	
		Don't know	4	60
		N.A.	5	
7.	Why?			61
8.	What else would you like to say?			62

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MULTILINGUAL PROJECT

PARENT'S QUESTIONNAIRE

When answering, please circle the number of your choice,
eg. if you are male, circle: Male ①
if you are female circle: Female ②

Write in answers where a dotted line is provided.

This questionnaire may be answered by either the father or the mother of the student. Some questions ask about your wife or husband. Please answer these questions if you can, and if you cannot answer them mark the space with a cross (X).

For Office Use Only

1	Respondent number	1/2/3/4
2	Identification of Questionnaire	5
3	Card number	6
4	Blank	7
5	Language of Questionnaire	8/9
6	Date: Year (197)	10
	Month	11/12

7. Name...

8. Address..

....

9. Sex Male 1 Female 2 13

10-11. In what country were you born?
Husband.............. 14/15
Wife................. 16/17

12-13. Where did you live before coming to Australia?
Husband.............. 18/19
Wife................. 20/21

14-15. How many years have you been in Australia?
Husband.............. 22/23
Wife................. 24/25

16-17. What is your native language?
Husband.............. 26/27
Wife................. 28/29

18. Do you speak in a dialect?
Always 1 Sometimes 2 Never 3 30

19. What is your child's native language? 31/32

20. In what country was the child born?
.... 33/34

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What is your child's name? 35

21. What school does he/she go to?.................................. 36/37/3

22. What is his/her Grade?................. or Form?................ 39/40

23. Does the child often talk to you about schoolwork?

Every day 1 Quite often 2 Rarely 3 Never 4 41

Your child has been working with booklets or taped texts which are available in English and several other languages. The study units include: Animal Families, Buying, Communications, Libraries and You, Melbourne: The First 50 Years, Myths of the Australian Aborigines, Traffic Accidents, and others.

24. Have you seen any of these units?

Yes 1 No 2 Don't know 3 42

25. Have you helped your child to work with them?

Often 1 Sometimes 2 Never 3 43

26-27. In what language(s) was the study unit your child has been using?

1st language 44

2nd language 45

28. Has working with these booklets helped your child

(circle one only)

to learn English?	1	
to learn another language?	2	
to learn both English and another language?	3	
Not very much in any language?	4	
Don't know	5	46

	Very much	A little	Nothing	Don't know	
29. How much do you think working with these study units has taught your child about things he/she did not know before?	1	2	3	4	47

Office use

	Very Much	A little	Not at all	Don't know	
30. Has working with these study units improved your child's attitude to school?	1	2	3	4	48
31. Has it helped the child to understand schoolwork?	1	2	3	4	49
32. Would you like your child to continue with this work?	1	2	3	4	50

33. Do you think bilingual education is good for your child?

Yes 1 No 2 Don't know 3 — 51

34. Why? .... — 52

35. Would you like your child to use bilingual textbooks

- in all subjects?	1	
- in some subjects?	2	
- in only one subject?	3	
- not at all?	4	53

36. Is the child learning your native language(s)?

(circle one only)

learning the language of both parents	1	
learning father's native language	2	
learning mother's language	3	
not learning either parent's language	4	
not applicable (eg. parent's native language is English)	5	54

37. Where does the child learn the language?

at school in regular classes?	1	
in special school or classes after school hours?	2	
at home or from friends?	3	
not at all?	4	55

	Very Well	Adequately	A little	Not at all	
38. How well does the husband speak English?	1	2	3	4	56
39. How well does the wife speak English?	1	2	3	4	57

Office use on

40-44

In what Language do you speak

	Only English	Mostly English	Mostly Another Language	Only Another Language	Not Applicable.	
- with your husband or wife?	1	2	3	4	5	58
- with your children?	1	2	3	4	5	59
- with other members of your family?	1	2	3	4	5	60
- with your friends?	1	2	3	4	5	61
- with other people?	1	2	3	4	5	62

45. Do you think that parents should help their children with their schoolwork?

Parents should help	1	
Children should be taught at school, not by parents	2	
Don't know	3	63

46. Do you think it is difficult to help the children with their schoolwork when it is in English?

Yes 1 No 2 Don't know 3 64

47-48. Have you ever visited your country of origin since migrating to Australia?

	More than once	Once	Not at all	Not applicable	
Husband	1	2	3	4	65
Wife	1	2	3	4	66

49-50. Would you like to return to your country of origin?

	Permanently	For a visit	Never	Don't know	Not applicable	
Husband	1	2	3	4	5	67
Wife	1	2	3	4	5	68

51-52. Do you want your children to speak your language?

	Yes	No	Doesn't Matter	Don't know	Not applicable	
Husband	1	2	3	4	5	69
Wife	1	2	3	4	5	70

53. Why?.. 71

54-55. Do you want your children to read and write?

	Yes	No	Doesn't Matter	Don't Know	Not Applicable	
Husband	1	2	3	4	5	72
Wife	1	2	3	4	5	73

Office use onl

56-57. Do you want your grandchildren to know your language?

	Yes	No	Doesn't Matter	Don't Know	Not applicable	
Husband	1	2	3	4	5	74
Wife	1	2	3	4	5	75

58. Anything else you would like to say?

....

....

....

.... 76

Thank you for your help.

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SCHOOL OF EDUCATION

MULTILINGUAL PROJECT

UNIT EVALUATION

INSTRUCTIONS

Please circle (e.g. ②) the appropriate number of your choice, or write the answer in the space provided.

For Office Use Only

1	Respondent number	1/2/3/4
2	Questionnaire identification	5
3	Card number	6

The following questions refer to specific Project units. Please give a separate evaluation for each of the units you have used. Any comments would be very valuable.

4. Name of unit 7/8

5. School 9/10/1

6. Teacher's name ....

Date: 7. Year 19... 8. Month.................... 12/13/1

9. On average, how many hours per week did your students work on this unit?

.... 15/16

10. How many weeks did it take them to complete the unit? 17/18

11. Grade(s) or Form(s) using unit:

	Yes	No	
(a) Grade 5	1	2	19
(b) Grade 6	1	2	20
(c) Form 1	1	2	21
(d) Form 2	1	2	22
(e) Form 3	1	2	23
(f) Form 4	1	2	24
(g) Form 5	1	2	25
(h) Form 6	1	2	26
(i) Other	1	2	27

If other, please specify:..

.... 28

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On

Please evaluate the following aspects of the material by circling the appropriate number.

	Very Satisfactory	Satisfactory	Not Satisfactory	Not Applicable
Contents	1	2	3	4
Language	1	2	3	4
Style of writing (e.g. too formal/ informal)	1	2	3	4
Instructions clear enough for students to work independently	1	2	3	4
Questions and activities	1	2	3	4
Foreign language translation	1	2	3	4
Format of the booklets	1	2	3	4
Illustrations	1	2	3	4
Workbook	1	2	3	4
Resource kit	1	2	3	4
Other materials (please specify)	1	2	3	4

....

....

Comments (If you consider some aspects of the materials to be unsatisfactory or exceptionally good please give reasons here.)

....

....

....

....

....

....

	Yes	No	Don't know
Would you use this unit again?	1	2	3